Small Business Institute Director's Association

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THERE ARE FEW DIFFERENCES BETWEEN SUCCESSFUL AND FAILED SMALL BUSINESSES

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ABSTRACT

Literature supports the idea that the difference between a successful and a failed small business is dependent upon the firm having (or using with more efficiency) greater access to variables such as (capital . . . management skills). With a sample of 216 matched pairs this study used bivariate statistics to test the hypothesis that successful businesses have significantly better results for all 15 literature variables ($p<.05$). The test results reveal that successful firms made significantly greater use of only two variables: professional advisors and their parents owned a business. At variance with the literature and expectations, the failed business owners had a higher level of education and experienced fewer staffing difficulties. It can be concluded that there may not be a valid and reliable set of variables that can distinguish success from failure, and that a different methodological research approach may be necessary. It can be implied that success comes from examining and understanding these variables and applying them for the specific situation at hand.

INTRODUCTION

The important role of small business suggests that an understanding of why firms fail and succeed is crucial to the stability and health of the economy (18). Of major concern to any would-be entrepreneur is the chance of success for the proposed business. Success versus failure prediction research benefits entrepreneurs; those who assist, train and advise them; those who providecapital for their ventures; suppliers, and public policy makers (1, 3, 7, 13, 14, 23, 26, 35).

There are many studies that analyze business success versus failure. However, as Gaskill, Van Auken, and Manning (18) stated: there are many questions still to be resolved and warrant additional exploration . . . previous studies do not provide a comprehensive or unified explanation for small firm failure . . . comparisons are needed between successful and failed small business owners.

Prior empirical studies of failure have concentrated almost exclusively on financial ratio data, though other studies of failure usually cite managerial variables as being critical (31). The usefulness of ratio-based business failure prediction models have been questioned (e.g., 2, 11, 20, 32, 33, 34). For example, ratio models have been found to be poor predictors of bankruptcy: of 132 businesses predicted to fail, only 5 were discontinued over a five-year period. These models had about a 97 percent Type H error rate (15). It has been indicated that qualitative data can provide at least as good predictions as traditional financial ratios (35). This study is not based not financial ratios, but on quantitative and qualitative managerial factors contributing to success or failure.

To date, no other success versus failure studies have been found that compare the resources of successful and failed businesses: to determine bivariate statistical differences through surveying failed businesses- using matched pairs. Other studies (8, 9,27, 28) have surveyed firms conducting business; then after a year or longer, some of the firms failed. At that time, they compared the responses of the failed firms and the surviving firms to analyze the differences without ever questioning the failures to ask them why they failed. This matched pairs design avoids comparing larger businesses to smaller ones, retailers to manufacturers or construction companies, older to younger firms, and businesses from different locations by controlling for these variables.

VARIABLES DISTINGUISHING BUSINESS SUCCESS FROM FAILURE: THE LITERATURE

There is no generally accepted list of variables distinguishing business success from failure. However, prior research has created discrepancies within the literature by citing different variables as contributing factors to success or failure. The two most commonly stated distinguishing variables are capital and management experience. In 20 journal articles, only 14 (70%) specifically state that these two variables contribute to success versus failure; however other studies claim they do not. The list of success versa failure variables in this study was developed by including the fifteen major variables, identified in 20 journal articles, as contributing to versus failure. See Table 1 for an explanation of the 15 variables, and Table 2 for a comparison of the 20 studies that support, do not =Mrt, or do not mention each variable see Tables 1 and 2 at the end of this paper.

The Literature Variables

S/F = f (capital, record keeping and financial control, industry experience,
management experience, planning, professional advisors, education,
staffing, product/service timing, economic timing, age of owner,
partners, parents owned a business, minority, marketing skills)

Research Question and Hypothesis

Do successful and failed businesses have equal resources? According to the literature review, although there are discrepancies, the successful businesses should have the more favorable resources for all 15 variables. This study will support or not support each of the major 15 variables in the literature through bivariate testing. If the successful firms do have significantly greater resources ($p<.05$), then this study supports prior research. However, if the successful firms do not have greater resources, then hers should reconsider the methodological approach to determine success versus failure.

Hypothesis: Successful small businesses have significantly greater resources ($p<.05$) than failed businesses for all 15 variables.

METHODOLOGY

This study adopts Dun & Bradstreet (6:i) definitions of failure and discontinuance. Business failures are firms involved in court proceedings or voluntary actions involving losses to creditors. Chapter 7 and Chapter 11 companies are both considered to have failed due to loss to creditors:

> Chapter 7 companies liquidate their assets whereas Chapter 11 companies restructure their debt and stay in business. Firms going out of businesses without loss to creditors are not considered business failures: they are discontinued businesses. To be considered a success the business must make at least industry average profits.

Sample

The sample was limited to the six New England states--Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The population of failed businesses includes Chapter 7 and 11 companies. Due to difficulties in locating liquidated business owners, the sample frame was Chapter 11 companies. The failure sample was generated from the bankruptcy court records.

The questionnaire was first mailed to each owner/CEO filing Chapter 11 during the most recent year. The questionnaire was then mailed to each failed respondent successful company match. Matching was selectively based on size (number of employees), age (all firms are ten years old or less), location (same state and city, or city close by), and industry (same Dun & Bradstreet classification) to ensure relevant comparisons. The combined percentage of failure and successful company matched response rate is 39 percent. A total of 216 usable questionnaires equally divided between failed and successful firms were returned and analyzed.

Measurement

To increase reliability, the questionnaire was carefully developed through four pretests with each of the variables defined on the questionnaire. One of the major concerns was response rate.

Because the questionnaires length was limited in order to increase the response rate, a trade-off was made; rather than having several repeat questions, the questionnaire used one open-ended question to check reliability. There was only one nonreliable response (.005%); therefore, reliability is inferred.

The questionnaire had 15 questions designed to measure the successful and failed businesses' resources for each of the 15 variables identified in the literature. In the variables column, in (parentheses) of Table 3 at the end of this paper, the measurement of each variable is given. Columns Two through Five provide the failed and successful mean and standard deviation, or frequency.

In addition to the descriptive data in Table 3, the sample of small businesses included approximately 20 percent from Connecticut, 5% Maine, 44% Massachusetts, 19% New Hampshire, 9% Rhode Island, and 6% Vermont. The m ean age of the failed and successful firms was 5.5 and 5.8 years. The mean, median, and made of the number of employees for the failed and successful firms were: 25.33, 15.00, 5.00; 22.22, 8.00, 2.00 respectively. Industry representation (as classified by Dun & Bradstreet) includes approximately: 2 percent agriculture, 14% construction, 17% finance, 10% manufacturing, 22% retailing, 3% wholesale, 6% transportation and communication, and 25% services.

The failed and successful descriptive statistical measures for each of the 15 variables were compared using the appropriate bivariate test for the measurement scale. The variables measured on the ratio scale compare the successful mean to the failed mean using the paired t-test. The variables measured on the seven point Likert scale are ordinal data comparing mean ranks using the Wilconxon matched pairs signed ranks test; however, the means rather than mean ranks are given in Table 3 for easier comparison. The variables measured on the nominal scale compare frequency distributions using the Mcnemar paired chi-square test. See Table 3 Column six for the T, Z, and X2 values of bivariate testing. At the bottom of the table is a listing of which test was used with each variable. The significant differences are identified with asterisks.

BIVARIATE STATISTICAL RESULTS

Hypothesis Test of Differences Between Successful and Failed Businesses

According to the hypothesis the successful small businesses should have significantly greater resources ($p<.05$) than failed businesses for all 15 variables. However, this was not the case. The successful businesses had significantly greater resources for only 2 of the 15 variables (13%). Successful businesses did make greater use of professional advisors, and more of them had parents who owned a business. However, counter-intuitive to the literature, the failed business had significantly greater resources for two variables. Failed business owners had a higher level of education and an easier time staffing. Refer back to Table 3 for a comparison of all variables and a listing of the type of test used for each variable.

DISCUSSION

The results of this study contradict prior literature and common expectations. Part of the discrepancy between this study and the literature may be due to the fact that of the 20 articles only 5 are based on good empirical research (8, 9, 18, 27, 28). The other articles are based primarily on secondary source and opinions. The trend towards requiring empirical research as a criteria for publication should continue.

Should results that contradict prior literature and common expectations be published? Such findings can in fact serve to add to our insights. However, contradictions should only be published if they are based on meticulously developed and executed empirical research designs.

Again, this study has a large sample size of 216 with a response rate of 39 percent which is large for studies actually surveying failed businesses. The matched pairs design controls for firm size, industry, regional context, and age of the firm. All four are considered to have a statistically significant impact on firm survival (8, 9, 27, 28). Critical to survey which is the sample. In addition to the sample methodology presented, bivariate testing was used to determine the validity of the sample, and to address nonresponse bias. Results are presented in the next three sub-sections.

Validity of the Chapter 11 Company Sample

Chapter 11 firms are early representatives of closed businesses. Wood (40) reported less than 5 percent of Chapter 11 companies survive whereas Flynn (17) reported a 10 to 12 percent survival rate. In this study 14 percent of the respondents were in Chapter 7 proceedings. The responses of the Chapter 7 companies were compared to the Chapter 11 companies to determine differences. Of the questions testing the model, none were significantly different ($p<.05$). Therefore, t-testing infers that the dominantly Chapter 11 sample is a valid representation of failures.

Sample Representation

To ensure that the sample represents the population, a comparison was made of the sample failure frequency distributions to the failure population by state and industry. The population figures include Chapter 7 and Chapter 11 failures (Dun & Bradstreet 1993). Using the chi-square test, there is no significant difference ($p<.05$). In other words, businesses in all six states, and all types of businesses, are represented by about the same percentage in the sample as the population which they represent. Percentage representation of the sample was listed above.

Nonresponse Bias

Nonresponse bias was minimized in this study by including initial nonrespondents in the sample, and by comparing statistically the initial nonrespondents' data to that of the initial respondents to ensure that there is no significant difference. Approximately 10 percent of the sample includes initial nonrespondents. Of the questions testing the model, no responses are significantly different ($p<.05$). The t-test and chi-square test results infer that the sample is not problematic due to nonresponse bias.

IMPLICATIONS AND CONCLUSIONS

There are discrepancies in the literature about which variables do in fact distinguish business success from failure (Table 2), and between the literature and the findings of this study. In other words, there is no valid and reliable list of variables to date. Does this mean that practitioners and researchers cannot benefit from this research? Certainly not. They should realize that there are few significant differences between successful and failed small business owners, that there are exceptions to the rule, and that there may not be a valid and reliable set of variables that can distinguish business success from failure. For example, this study found only four out of 15 significant differences (and two were the reverse of expectations) between successful and failed businesses, and all have exceptions. Each is presented separately:

1. Significantly more successful business owners had parents that owned their own businesses than owners of failed businesses. However, more successful owners did not have parents that owned a business than those that did (63 vs. 45).

2. Successful businesses make significantly greater use of professional

advisors than failed businesses. However, a couple of the owners stated the reason for their failure was poor professional advice.

3. Failed business owners had a significantly higher level of education than successful business owners. However, some of the successful business owners had master and doctorate degrees.

4. Failed businesses had less difficulty staffing than successful businesses. However, some of the successful firms reported no difficulty.

Does the observation that failed business owners have a higher level of education and less difficulty, staffing imply that education and staffing are not important? No. Significant does not always mean important. When examining the educational difference, it is only about two-thirds of a year. The failed business owners' mean level of education is about 3 1/3 years of college whereas successful owners is 2 1/2. Having more education does not cause failure, nor success. The level of difficulty staffing is a self-reported perception. The difference could be due to perception, or the fact that the owners of failed businesses were not as selective in recruiting, selecting, and retaining "good" employees. One cannot conclude that if a business does not have difficulty staffing it will fail. In addition, one cannot conclude that it is necessary to have parents who owned a business since this is beyond the control of the entrepreneur. Similarly one cannot conclude that a business owner must use professional advice to be successful. These factors are helpful, but not necessary.

Implications For Practitioners

A major implication for would-be entrepreneurs is that they should not seek to compare themselves to a list of variables and think: if I meet all/most of these criteria variables I will be a successful business owner, nor, if I do not meet all/most of these criteria I will not be successful.
In addition, some of the variables are beyond the entrepreneur& control. One cannot influence their parents owning a business or being a minority. The would-be entrepreneur can benefit from prior research by considering these variables when making the decision to start a business, but realize that there are exceptions and limitations to their use. And that resources such as experience and skill can be attained before and during business ownership.

The same implication applies to those who assist, train and advise entrepreneurs, those who provide capital for their ventures, suppliers, and public policy makers. Those who assist, train and advise entrepreneurs should make them aware that variables do help to distinguish business success or failure, but there are many exceptions to the rule. Those who provide capital and supplies to new ventures should consider the variables, but be aware of their limitations for predicting success or failure. Public policy makers should continue to support small business with an understanding of these variables.

Implications for Researchers

A major implication for researchers is the reality that a valid and reliable list of variables, a model, that can distinguish business success from failure does not exist. There may be a more effective approach to the study of business success versus failure. Perhaps we can learn from leadership research. In the early 1900s, using leadership trait theory, researchers tried to identify a set of characteristics, that distinguished leaders from followers. By the late 1940s, theorist focused on what the leader did, behavioral leadership, in order to find the one best leadership style in all situations. By the late 1960s, contingency leadership theory focused on determining the appropriate leadership for a given situation.

This study supports the emphasis of Robinson and Pearce (29) and Cochran (10) on the importance of focusing research studies on single industries within specific regions of the country.

The size of the business may also be a factor. This research approach more closely resembles contingency theory, and could be called contingency theory of business success versus failure. Researchers must realize, however, that there may not be a valid and reliable list of variables even within specific industry segments.

A major contribution of this study is the use of Chapter 11 companies and the matched pairs design. Gaskill et al. (18, 19) calls for comparative studies between successful and failed small businesses but notes the difficulties involved in obtaining usable samples of failed businesses. As shown in this study, Chapter 11 companies are a representative sample of failed businesses. Hence using Chapter 11 companies overcomes most of the difficulties involved in obtaining failed samples. The matched pairs design can be used to help control for industry, size, location, age, etc.

In addition, it would be helpful to have a universally accepted operational definition of business failure. This study supports the use of Dun & Bradstreet definition which distinguishes failed business from discontinued businesses. There is also a need for empirical research rather than reporting secondary sources or giving opinions on why businesses or fail. Researchers should report discrepancies in the literature and between the literature and their studies. The use and limitations of any list of variables or models that predict success versus failure should be clearly stated, and over-generalizations of findings should not be made.

As with any study, this research has limitations. Eight of the fifteen variables (capital, record keeping and financial control, planning, professional advice, staffing, product/service timing, economic timing, and marketing) are the subjective self-reported perceptions of business owners (see Table 3). Although self-reported perceptions are a recognized and frequently used method of data collection, recognition must be given to the fact that the data collected may not mirror the exact extent of the business owners' resources. Therefore, it is recommended that further research incorporate more objective measures for these variables. And because the sample was taken from eight industries in New England, results may be different for single industry studies or for studies based in other parts of the USA, or countries.

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Table 1

Explanation of Success versus Failure Variables

Capital (capt). Businesses that start undercapitalized have a greater chance of failure than firms that start with adequate capital.

Record keeping and financial control (rkfc). Businesses that do not keep updated and accurate records and do not use adequate financial controls have a greater chance of failure than firms that do.

Industry Experience (inex). Businesses managed by people without prior industry experience have a greater chance of failure than firms managed by people with prior industry experience.

Management Experience (maex). Businesses managed by people without prior management experience have a greater chance of failure than firms that are managed by people with prior management experience.

Planning (plan). Businesses that do not develop specific business plans have a greater chance of failure than firms that do.

Professional Advisors (prad). Businesses that do not use professional advisors have a greater chance of failure than firms using professional advisors.

Education (educ). People without any college education who start a business have a greater chance of failure than people with one or more years of college education.

Staffing (staff). Businesses that cannot attract and retain quality employees have a greater chance of failure than firms that can.

Product/Service Timing (psti). Businesses that select products/services that are too new or too old have a greater chance of failure than firms that select products/services that are in the growth stage.

Economic Timing (ecti). Businesses that start during a recession have a greater chance of failure than firms that start during expansion periods.

Age (age). Younger people who start a business have a greater chance of failure than older people starting a business.

Partners (part). A business started by one person has a greater chance of failure than a firm started by more than one person.

Parents (pent). Business owners whose parents did not own a business have a greater chance of failure than owners whose parents did own a business.

Minority (mior). Minorities have a greater chance of failure than nonminorities.

Marketing (mrkt). Business owners without marketing skills have a greater chance of failure than owners with marketing skills.

Table 2
A Comparison of Variables Identified in the Literature as Factors Contributing to Business Success versus Failure

Senior Author	Independent Variables capt	rkfc	inex	maex	plan	prad	educ	staf	psti	ecti	age	part	pent	mior	mrkt
Barsley	F	-	F	F	F	F	-	-	-	-	-	-	-	-	-
Bruno	F	F	-	F	F	-	-	F	F	F	-	-	-	-	F
Cooper 90	F	-	N	N	F	F	N	-	F	F	F	F	-	F	-
Cooper 91	F	-	F	N	-	F	F	-	N	N	N	N	F	F	-
Crawford	-	-	F	-	-	F	F	-	-	N	N	-	-	-	-
D&B St.	F	F	F	F	-	-	-	-	-	F	-	-	-	-	-
Flahvin	F	F	F	F	-	F	-	F	-	-	-	-	-	-	-
Gaskill 93	N	F	F	F	F	F	N	-	-	N	-	-	-	-	F
Hoad	-	-	F	N	N	F	F	-	-	-	-	-	-	-	-
Kennedy	F	-	-	F	F	-	-	-	-	F	-	-	-	-	-
Lauzen	F	F	-	F	F	-	-	F	-	-	-	-	-	-	-
McQueen	F	-	F	F	-	-	-	-	-	-	-	-	-	-	F
Reynolds 87	F	F	-	-	F	-	-	N	F	-	-	-	-	-	N
Reynolds 89	F	F	-	-	F	-	N	N	F	-	N	F	-	-	-
Sage	F	-	-	F	-	-	F	-	-	-	-	-	-	-	-
Sommers	-	-	-	F	F	-	-	F	-	-	-	-	-	-	-
Thompson	N	-	-	F	F	-	-	F	F	-	-	-	-	-	F

Vesper	F	F	F	F	N	F	F	-	F	F	-	F	-	-	F
Wight	F	F	-	F	-	F	-	-	-	-	-	-	-	-	-
Wood 89	-	F	F	F	F	-	F	-	-	-	-	-	-	-	-
Total F	14	10	10	14	11	9	6	5	6	5	1	3	1	2	5
Total N	2	0	1	3	2	0	3	2	1	3	3	1	0	0	1
Total -	4	10	9	3	7	11	11	13	13	12	16	16	19	18	14

F supports variable as a contributing factor
N does not support variable a contributing factor
- does not mention variable as a contributing factor

Table 3
Descriptive and Bivariate Statistical Results

Variables					
1. Capital	4.75	1.61	4.60	1.54	Z 0.753
(1 adequate - 7 inad)					
2. Record keeping and financial control	4.69	1.72	4.77	1.54	Z 0.392
(1 poor - 7 good)					
3. Industry experience	10.00	8.34	8.39	7.99	T 1.53
(number of years)					
4. Management experience	9.29	7.74	7.63	8.21	T 1.51
(number of years)					
5. Planning	4.09	1.71	3.84	1.52	Z 1.171
(1 specific - 7 no plan)					
6. Professional advice	3.96	1.72	3.03	1.39	Z 2.679**
(1 used - 7 not used)					
7. Education	15.32	2.98	14.53	2.59	T 2.30*
(number of years)					
8. Staffing	5.05	1.59	4.29	1.72	Z 3.469***
(1 difficult - 7 easy)					
9. Product/Service timing	3.94	1.45	3.95	1.31	Z 0.204
(1 intro. - 7 expan.)					
10. Economic timing	4.19	1.85	4.20	1.76	Z 0.209
(1 recession - 7 expan.)					
11. Age of owner	37.17	8.81	35.89	8.84	T 0.89
(number of years)					
12. Partners	62		70		X(2) 1.45
(number with partners)					
13. Parents	33		45		X(2) 4.46*
(# who owned a business)					
14. Minority	8		6		X(2) 0.31

(# of minority owners)					
15. Marketing	4.46	1.77	3.94	1.76	Z 1.749
(1 unskilled - 7 skilled)					
a. Age of business	5.49	2.80	5.82	2.78	T 0.877
(number of years)					
b. Size	25.33	37.79	22.23	42.33	T 0.567
(number of employees)					

n = 108 failed, and 108 matched successful firms

a + b are letters because they are not success versus failure variables

Bivariate test to determine significant differences:

Paired t-test-- Variables 3,4,7,11,a,b

Wilcoxon matched-pairs signed ranks test-- Variables 1,2,5,7,8,9,10,15

Mcnemar paired chi-square test-- Variables 12,13,14

Significance level * $p < .05$

** $p < .01$

***$p < .001$

A MODEL OF ENTREPRENEURSHIP: THE PROCESS OF VENTURE CREATION

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There has been a great deal of research on personality traits of entrepreneurs, but many researchers have expressed dissatisfaction with trait research because it fails to properly address the process issues of entrepreneurship: the creative act of starting the venture. This paper will focus on the act of entrepreneurship: the process of venture creation, management and growth.

INTRODUCTION

What makes one person choose entrepreneurship and another person choose the corporate ladder? What makes one entrepreneur content with a neighborhood store while another takes the business public? These are questions which have fascinated researchers for decades. There are no definitive-answers. In fact, there is no generally accepted definition of the words "entrepreneur" or "entrepreneurship." Without that basic level of agreement, the earlier questions seem unanswerable.

DEFINITIONAL ISSUES

The controversy over the definition of entrepreneurship and the identification of entrepreneurs has been played out in the literature (Gartner, 1988; Carland, Hoy and Carland, 1988). Since McClelland (1961) much of the controversy has centered on the individual who creates a venture. A plethora of articles focussing on personal characteristics has emerged (i.e., Pickle, 1964; Hornaday & Aboud, 1971; Simmons, 1978; Brockhaus, 1980; Dunkelberg & Cooper, 1982; Brockhaus & Horwitz, 1986; Carsrud, Olm & Eddy, 1986; McClelland, 1987; Solomon & Winslow, 1988; Winslow & Solomon, 1989; Carland & Carland, 1991) and several attempts have been made to establish a definition of the term entrepreneur (Carland, Hoy, Boulton & Carland, 1984). Nevertheless, no consensus definition has emerged (Shaver & Scott, 1991). Researchers have been like the proverbial blind men describing an elephant. Some researchers think entrepreneurs are like ropes, others like trees, and still others like snakes.

Many researchers have approached this absence of a consensus by positing types of entrepreneurs (i.e., Smith, 1967, Webster, 1977; DeCarlo & Lyons, 1979; Vesper, 1980; Mescon & Montanari, 1981; McClelland, 1987; Louis, Blumenthal, Gluck & Stoto, 1989; Gartner, Mitchell & Vesper, 1989). Other researchers have discussed the limitations inherent in such approaches (Wortman, 1987; Shaver & Scott, 1991) and some have attacked the validity of the approach entirely (Gartner, 1988). Some researchers seem to have totally abandoned the pursuit of a definition as impossible (Mitton, 1989) while others decry the need to shift focus from the individual to the entrepreneurial process (Bygrave & Hofer, 1991) and still others fear that even should one develop an understanding of the personality of an entrepreneur that would not be valuable since individual behavior is not consistent over time nor can personality traits predict behavior (Gartner, 1989).

How is it that so many learned people can look at entrepreneurs and the process of venture creation and see so many different entities? Not only have results been contradictory (i.e., Brockhaus, 1982; Gasse, 1982) but sometimes it has seemed that the individuals and issues under study were aberrant (i.e., Ket de Vries, 1985; Winslow& Solomon, 1987; 1989). Some researchers have suggested that the difference in vision occurs because of a difference in measurement instruments (Sexton & Bowman, 1984; 1985). Others have posited that the groups of people under study differed significantly in characteristics and behavior (VanderWerf & Brush, 1989).

Is it important to pursue this issue of DEFINITIONAL conflict? These authors think that it is and so do many other researchers. The failure to establish definitions has disrupted the evolution of a framework for the entrepreneurship discipline (VanderWerf & Brush, 1989; Bygrave & Hofer, 1991) and has resulted in efforts to examine the entrepreneurial process from social (Reynolds, 1991), anthropological (Stewart, 1991), economic (Kirchoff, 1991),strategic management (Sandberg, 1992) and other approaches. All of these approaches are valuable and greatly advance the field but the fact remains that entrepreneurship is unique among organizational and economic functions in that it is initiated by an act of human volition (Hofer & Bygrave, 1992). It is this intentionality that distinguishes the entrepreneur (Bird & Jelinek, 1988). If one wishes to understand the entrepreneurial process, one must understand the role of the individual triggering that process (Carland, Hoy & Carland, 1988).

Consider for a moment the tacit assumptions of the definitional debate. Virtually all of the empirical investigations assume that entrepreneurship is a discontinuous function. Many authors (i.e. McClelland, 1961; Mancuso, 1975; Carland, Hoy, Boulton & Carland, 1984) discuss entrepreneurs contrasted against other groups. Others (i.e., Webster, 1977; Dunkelberg, & Cooper, 1982; Vesper, 1980; 1990) categorize entrepreneurs as failing in one of several classifications. The former school incorporates a tacit assumption that one either is, or is not, an entrepreneur: a dichotomous condition.

The latter school is based on a tacit perspective that entrepreneurs describe a step function: a discontinuous distribution. What if those axioms are invalid? Carland (1982) suggested that entrepreneurship might actually be a continuum. If it is, then much of the conflict in findings and many of the anomalies could be explained: the people under investigation in all of the studies shared entrepreneurial tendencies but not in the same intensity. Carland, Carland and Hoy (1992) presented an index of entrepreneurial drive which showed precisely that: entrepreneurship is a continuous function. The function is a personality trait or drive which is translated into a need to create or create and grow a business venture. If that perspective is correct, it could lead to answers to the earlier questions: what makes a person choose entrepreneurship; what makes one entrepreneur content with a small business while another strives to dominate an industry? The search for answers continues.

MASLOW'S HIERARCHY

Maslow (1943, 1971) posited that individuals were motivated by a hierarchy of needs. At the lowest level are security needs, followed at increasingly higher levels by needs for social acceptance, then for self-esteem, culminating in needs for self-actualization. The hierarchy of needs suggests that individuals advance from basic needs like food, shelter and comfort, to higher levels of needs including social acceptance, self esteem and self actualization. The authors posit that entrepreneurial activity can and does become a lens for advancement through that hierarchy of needs. That is, entrepreneurship can provide the financial means to achieve basic needs, but it can also provide a vehicle by which an individual can obtain social acceptance and self esteem; and even advance to realizing self actualization. It may well be that the differences in observed behavior of entrepreneurs and the processes which they pursue in creating, managing and growing their ventures are a function of their vision of the venture and the purpose it serves in their personal pursuit of self actualization. The purpose of this research is to test theat hypothesis.

THE EMPIRICAL EXAMINATION

The Instrument

The authors prepared a survey which included demographic questions and an instrument which examined the strength of the entrepreneurial drive. The survey contained a second instrument which was designed to measure the hierarchical drives of each respondent in terms of his or her view of the business venture. A copy of this instrument, referred to as the Satisfaction Index, is displayed in Appendix A. The perspective was measured in terms of the Maslow hierarchy by examining the role of the business in each individual's pursuit of basic needs, social acceptance, self esteem and self actualization.

The Carland Entrepreneurship Index was employed to identify the strength of an individual's entrepreneurial drive. The Index consists of 33 pairs of statements in a forced choice format. The instrument requires less than 10 minutes to complete, can be scored by untrained administrators, and results in a scaler score which can be interpreted as a representation of the strength of one's entrepreneurial drive. The test-retest correlation for the Entrepreneurship Index was .80 with a split-half, odd-even reliability of .73. The Kuder-Richardson test for validity was .73 indicating good reliability and validity statistics for the Index (Carland, Carland, & Hoy, 1992).

The Sample

The survey was convenience based. The authors used students to distribute and collect questionnaires. The data was collected over a period of three months primarily from people located in the Southeastern United States. Since the data was collected through personal approaches, there was a high level of participation. Fewer than 5% of those approached declined to participate. The result was that data was collected from individuals who might not have responded to a questionnaire by mail. The resulting database contained 156 usable surveys. Details of the demographics of the respondents are displayed in Table 1.

Every respondent was a full time manager of a business in which he or she was a principal owner. Every business was independently owned and operated. Further, each business was classified small according to the Small Business Administration guidelines.

The Analysis

The first step of the analysis consisted of a factor analysis of the questions in the Satisfaction Index. The analysis used four principal components because the theoretical composition of the instrument involved questions on each of the four characteristics of Maslow's hierarchy. The matrix was rotated using the varimax procedure. The results are displayed in Table 2.

As the table indicates, the original instrument performed well with the exception of four questions, one of which failed to load at the .4 level, and three of which loaded on more than one factor at the .4 level. Those questions were eliminated and the remaining groupings were examined to determine whether the questions were consistent in measuring one of the Maslow characteristics. Each of the questions remaining in the four groups were consistent in their theoretical orientation. Consequently, the questions were formed into four models, displayed in Table 3, to establish a measure for each of the characteristics.

The next phase of the analysis involved preparing a correlation of the entrepreneurship index which measures the strength of the entrepreneurial drive and the four Maslow models derived from the factor analysis. The results are displayed in Table 4.

As the table shows, the basic needs model was inversely correlated with entrepreneurial drive. The social acceptance model was not significantly related to entrepreneurial drive. Finally, the self esteem and self actualization models were significantly correlated to the strength of entrepreneurial drive. The highest correlation occurred between the index and self actualization.

FINDINGS

The authors conclude that the respondents in this study who displayed higher entrepreneurial drive did view their businesses as vehicles for achieving self esteem and self actualization. Those respondents displaying lower entrepreneurial drive viewed their firms as vehicles for providing basic financial needs.

The respondents did not view their businesses as a lens for social acceptance. Entrepreneurs are known to display internal locus of control (Borland, 1974). For such people social acceptance is less important than self esteem. The findings of this study are consistent with that perspective.

A MODEL OF ENTREPRENEURSHIP

If one accepts that entrepreneurship is a drive which is stronger in some people and weaker in others, and that strongly driven entrepreneurs view their businesses as lenses for achieving self esteem and self actualization, a model of entrepreneurship can be developed linking entrepreneurship to individual motivation. Entrepreneurial behavior is somewhat unique in human society in that it leads to the creation of a business venture. This venture has the potential to provide for the basic needs of the individual who establishes or operates the organization. Further, the business venture can also satisfy higher level needs of individuals, including the need for self-actualization.

Consider that in some individuals the entrepreneurial drive is not strong enough to ever trigger the establishment of a business venture. Such people will look to corporate employment or other forms of employment in order to satisfy their basic needs for security. These people may, or may not, see their careers as vehicles for achieving the hierarchy of needs. In other people the entrepreneurial drive may be strong enough to trigger involvement in business ownership if, and when, an opportunity presents itself; in still others the drive may be so strong as to make business ownership inevitable. The strength of the drive might dictate how strong the circumstances surrounding an opportunity have to be in order to trigger venture creation or entrepreneurial activity.

Initially, all entrepreneurs may see their ventures as the vehicle for achieving the first level of need: security. The higher the entrepreneurial drive, the less important that need becomes and the more likely individuals are to perceive their ventures as devices for advancing up the hierarchy of needs. Those individuals with the strongest drive see entrepreneurial activity as the mechanism for achieving self-actualization. This model is depicted in graphic form in Appendix B.

The model explains that some entrepreneurs will be satisfied with simply providing family income while others will strive to take their ventures public and still others will be consumed by the effort to achieve industry domination. The personal goals which an individual entrepreneur pursues will be a function of the strength of that individual's entrepreneurial drive. No two entrepreneurs will be alike nor is there any likelihood that they will operate their businesses in a similar fashion.

CONCLUSIONS AND IMPLICATIONS

If the findings are sustained by future research, this research has the potential to lead to the establishment of a model of entrepreneurship which effectively links the role of individual initiative to the process of venture creation, management and growth. The results could end the debate between trait researchers and process researchers by providing a concrete and measurable link between the two. The results could explain the diversity of behavior which is observed among entrepreneurs and provide a vehicle for the more successful support and understanding of entrepreneurship in its various manifestations.

This research suggests that entrepreneurs initiate ventures, institute management processes and growth strategies, in direct proportion to the strength of their entrepreneurial drive. This relationship derives its power from the propensity of more highly driven entrepreneurs to view their businesses as vehicles for achieving self esteem and self actualization. Entrepreneurs with lower levels of drive are more apt to view life outside their businesses as vehicles for self esteem and self actualization, thereby relegating their businesses to a less important role in their lives. It is this difference in perspective which translates into a difference in process and behavior.

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APPENDIX A
SATISFACTION INDEX FOR BUSINESS OWNERS

For each of the following questions, circle CD if you completely disagree with the statement; CA if you completely agree with the statement; SD if you strongly disagree with the statement; SA if you strongly agree with the statement; D if you disagree with the statement; A if you agree with the statement; and NO if you have no opinion on the statement. Please respond to every question.

1. I run this company to support myself and my family.

   CD SD D NO A SA CA

2. I would be willing to sell my company if I could obtain a better paying job with another company

CD SD D NO A SA CA

3. I run this company because of the personal satisfaction I get from my work

CD SD D NO A SA CA

4. I run this company because I feel like it makes an important contribution to my community

CD SD D NO A SA CA

5. My contributions to my community are not related to my company

CD SD D NO A SA CA

6. I enjoy what I am doing with my company

CD SD D NO A SA CA

7. Opening this company gives me a sense of pride

CD SD D NO A SA CA

8. I would like to see my company grow and became dominant in its industry

CD SD D NO A SA CA

9. I would prefer to have complete oversight of the daily operations of my company

CD SD D NO A SA CA

10. My reputation in the community is based on my ownership of this company

CD SD D NO A SA CA

11. My accomplishments are defined by my business

CD SD D NO A SA CA

12. My primary source of satisfaction is my family and/or friends

CD SD D NO A SA CA

13. My primary goal is to achieve higher levels of success with my company

CD SD D NO A SA CA

14. Ownership of this company gives me feelings of security

CD SD D NO A SA CA

15. I feel that my company is recognized as making a contribution

CD SD D NO A SA CA

16. My business is my life

CD SD D NO A SA CA

APPENDIX B

A MODEL OF ENTREPRENEURSHIP

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      Inputs                  Goals                  Outcomes

   Strength of the     Goal of Entrepreneurial     Approach to Strategy
Entrepreneurial Drive        Activity               Development


 High------------------Self - Actualization-----------Make the Venture
        |                                   Dominant in its
        |                                   Market or Industry
        |
        |-----------Self -  Esteem-----------------Make the Venture
        |                                   Grow and Become
        |                                   Highly Successful
        |
        |
        |
 Low----------------------Security------------------Make the Venture
                                             a Small and Stable
                                             Income Producer
```

TABLE 1

DEMOGRAPHIC CHARACTERISTICS OF THE 156 RESPONDENTS

Type of Business	
Retail	46%
Service	31%
Wholesale	3%
Construction	8%
Manufacturing	10%
Other	1%
Annual Sales	
$100,000 or less	35%
$100,000 to $250,000	19%
$250,000 to $500,000	14%
$500,000 to $1,000,000	12%
$1,000,000 to $5,000,000	10%
$5,000,000 and over	7%
Number of Employees	
10 or less	70%
11 to 50	19%
51 to 100	5%
101 or more	4%
Business Form	
Proprietorship	41%
Partnership	19%
Corporation	40%
Age of the Business	
5 years or less	44%
5 to 10 years	24%
10 to 15 years	10%
More than 15 years	23%
Sex of Respondents	
Male	71%
Female	29%
Race of Respondents	
Majority	81%
Minority	19%
Age of Respondents	
Under 30 years	16%
31 to 40 years	22%
41 to 50 years	36%
51 to 60 years	19%
Over 60 years	6%
Education of Respondents	
12 years or less	26%
12 to 15 years	21%
16 years	31%

more than 16 years	21%

TABLE 2
ROTATED LOADINGS FROM FACTOR ANALYSIS

QUESTION	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
4	.739	.224	.064	.072
5	.646	.107	.135	.078
3	.522	.134	.026	.395
16	.153	.762	.141	.176
11	.122	.698	.208	.006
10	.103	.410	.333	.007
13	.091	.566	.213	.461
14	.347	.507	.170	.198
1	.108	.239	.762	.027
12	.389	.248	.514	.246
6	.410	.097	.040	.703
8	.073	.078	.021	.688
7	.385	.164	.083	.650
9	.255	.031	.484	.447
15	.479	.171	.458	.330
2	.283	.208	.385	.143
Percent of Varience Explained	14.3%	14.6%	9.6%	13.9%

TABLE 3
MODEL DRAWN FROM FACTOR ANALYSIS

BASIC NEEDS - QUESTION 1 + 12
SOCIAL ACCEPTANCE - QUESTION 3 + 4 + 5 + 15
SELF ESTEEM - QUESTION 10 + 11 + 14 + 16
SELF ACTUALIZATION - QUESTION 7 + 8

Model developed by eliminating questions which failed to load at the 4 level (Question 2) and questions which loaded on more than one factor at the .4 level (Questions 6, 9, and 13), grouping questions by factor, and examining grouped questions to determine characteristic.

TABLE 4
PEARSON CORRELATION MATRIX

N - 156

INDEX	BASIC	SOCIAL	ESTEEM	SELF

ENTREPRENEURSHIP INDEX	1.000				
BASIC NEEDS	-.229	1.000			
SOCIAL ACCEPTANCE	.128	.286	1.000		
SELF ESTEEM	.190	.215	.361	1.000	
SELF ACTUALIZATION	.327	.177	.324	.244	1.000

BARTLETT CHI-SQUARE STATISTIC: 96.3. DF - 10. PROBABILITY - 000

MATRIX OF PROBABILITIES

	INDEX	BASIC	SOCIAL	ESTEEM	SELF
ENTREPRENEURSHIP INDEX	.000				
BASIC NEEDS	.004	.000			
SOCIAL ACCEPTANCE	.112	.000	.000		
SELF ESTEEM	.017	.007	.000	.000	
SELF ACTUALIZATION	.000	.027	.000	.002	.000

UGANDA ENTREPRENEURS: WHY ARE THEY IN BUSINESS?

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ABSTRACT

The role of entrepreneurship in economic development is well recognized in most western countries. The recognition of this role is increasingly becoming international as many East European and third world countries replace state capitalism with free enterprise economic systems. This paper reports on a survey study done about the development and future prospects of entrepreneurship in Uganda. Based upon responses from 208 small business owners, the paper discusses what motivates Uganda entrepreneurs, their risk taking willingness, and the involvement of family members in the family business. The majority of Uganda entrepreneurs cited monetary considerations as the main reason for going into business, which could be a reflection of Uganda's current economic conditions. However, most of them would not exchange business ownership for jobs even if jobs became available and paid as well as their businesses. This was due to the independence Uganda entrepreneurs enjoy as business owners. Uganda entrepreneurs become entrepreneurs for monetary reasons but remain entrepreneurs for the freedom entrepreneurship accords them.

INTRODUCTION

The entrepreneurship spirit is catching on internationally as market-oriented economies replace planned economies, as individual/corporate capitalism replaces state capitalism, and as democracy replaces dictatorship. In countries such as the United States, small business and entrepreneurship make significant contributions to the economy. Small businesses (businesses with up to one hundred employees) employ close to 50% of the American workforce and produce over 40% of the gross national product (GNP). And since they create most of the new jobs, they are a key tool for getting the economy out of recessions. In a real sense, small business and entrepreneurship make up the centerpiece of the American free enterprise economic system.

Many policymakers in developing countries, especially with the collapse of central planning ideologies and increasingly at the urging of international bodies such as the International Monetary Fund (via the sometimes controversial structural adjustment policies), are adopting free enterprise mechanisms.

One of these mechanisms, small business/entrepreneurship, is looked at with particular enthusiasm and it is frequently thought or taken for granted that entrepreneurships "will lead the way to new economic development (Giamartino, 1991). Malcolm Harper has summarized the reasons why entrepreneurship is expected to play an even bigger role in developing countries than it plays in developed countries (Harper, 1991). The following are some of the reasons that Harper suggests. First, during colonial times (and many countries, especially in Africa, became independent as recently as the 1980s) government was responsible for all economic activities. This colonial legacy must be broken and entrepreneurship is the way to do it. Second, another legacy of colonialism are state enterprises, a good example of which are the ubiquitous marketing boards. These state enterprises are failing badly. They leave major gaps in goods, services, and jobs. Entrepreneurs are needed to continue the operations. Third, colonial governments and the multinational corporations originating from colonial mother countries tended to favor capital intensive technologies amidst a shortage of capital and an abundancy of labor. What is needed are local entrepreneurs to start new enterprises using labor intensive technologies. Fourth, some sections of the population in developing countries were deprived and, in some instances, continue to be deprived of access to resources. Such deprivation prevents these populations from participation in national (political and economic) development. Starting their own businesses is the only option available to them. This nation-building role of entrepreneurship, probably a secondary one in most developed countries, is a primary one in most new countries where entire tribal or religious groups do not have as yet a good sense of b elonging to "their" country. Another factor that makes entrepreneurship critical, especially in countries such as Uganda, the focus of this paper, are the civil wars that have devastated the economies left behind by the colonial regimes. In the case of Uganda, the wars all but destroyed the state enterprises. They did the same to peasant farming, thus, forcing a population influx into urban areas. Nearly unique to Uganda, the civil wars also forced an exodus of the Asian community from Uganda. They had been, since early in the colonial period, the backbone of Uganda's trading sector. When peace finally or temporarily returns, the gaps left behind must be filled. New entrepreneurs must set up enterprises to replace those destroyed by the wars and those that were abandoned by the Asians.

This paper investigates the form entrepreneurship in Uganda is taking and its prospects in the future. Because entrepreneurship develops within its surrounding environment (Peterson, 1988), we should expect certain unique features in relation to Uganda's entrepreneurship.

METHODS

Between the summer of 1990 and the spring of 1991 a questionnaire was distributed to about 700 Ugandan entrepreneurs in and around Kampala, the capital, and Masaka, a town 80 miles southwest of Kampala. The sample may be described as a Convenience Sample, not selected randomly at all. Business owners had to be approached in person at their places of business/work and requested to volunteer to complete the questionnaire. The completed questionnaires also had to be picked up in person by the author or his assistants. Many of the entrepreneurs who had volunteered to complete the questionnaire did not do so. However, by June 1992, 208 usable, completed questionnaires had been received, a response rate of 30%.

The questions on the questionnaire fell into the categories of demographic, motivation, risk-taking, family involvement, ownership, financing, location/ facilities, and sales growth strategies. In this paper, the discussion is restricted to demographic factors, motivation, risktaking, and family involvement.

Table 1 provides information about the sample entrepreneurs and their businesses.

Table 1

Demographic Features of the Surveyed Ugandan Entrepreneurs and Their Businesses

a. Types of Respondents' Businesses

Types	No.	%
Retail	64	31
Wholesale	20	10
Wholesale and Retail	25	12
Construction	13	6
Manufacturing	40	19
Transportation	8	4
Others	38	18
Total	208	100

b. Period in Existence

Years	No.	%
Under 30	45	22
Over 3 to 5	37	18
Over 5 to 7	40	19
Over 7 to 9	24	12
Over 9 to 11	22	11
Over 11 to 16	23	11
Over 16 to 21	6	3
Over 21	9	4

Not Given	2	1
Total	208	101

c. Age of Sample Entrepreneurs

Years	No.	%
Under 30	35	17
30-40	68	33
40-50	51	25
50-60	29	14
Over 60	18	7
Not Given	18	9
Total	208	101

d. Education of Sample Entrepreneurs

Level	No.	%
P7(7 yrs.)	13	6
S2 (9 yrs.)	12	6
S4 (11 yrs.)	72	35
S6 (13 yrs.)	43	21
Some University	1	<1
University Degree	48	23
Not Given**	19	9
Total	208	100

*May not be equal to 100 due to rounding in this and other tables.
**Probably 0 to 6 years of education.

FINDINGS

What Kind of People Go Into Business and Why?

It is assumed that unless we know the motives of those people who venture into small business, it will be difficult to promote entrepreneurship (Carland, 1988). Several questions on the questionnaire solicited reasons why the respondents were operating their own businesses. All questions were open-ended because there can be a large number of reasons why people go into business for themselves (Cooper, 1990). The responses had to be contentanalyzed for categorization.

As can be seen in Table 2a, a substantial majority (59%) of the Uganda entrepreneurs who were surveyed were in business for making a living more than for anything else. This message was expressed clearly, although in a variety of ways.Some of the responses on these lines were: "to make money," to earn money," "to supplement my office income," "that's only where I can get enough income for my development," "there is good money in business," "to earn a living," and "to become wealthy."

Fourteen of the 208 respondents (7%) indicated to be their own boss (independent) as the reason why they were in business for themselves. This was a significantly smaller percentage than is commonly found by researchers in other places (Shapero, 1985). It could be a reflection of Uganda's current circumstances as we point out later.

Table 2

The Motivation of Uganda Entrepreneurs

a. Why Are You in Business for Yourself?

Reasons	No.	%
Independence	14	7
Make a Living	123	59
Others	60	29
No Answer	11	5
Total	208	100

b. Why Don't You Work for Government or Somebody Else?

Reasons	No.	%
No Freedom	32	15
Low Pay	44	21
Others	107	51
No Answer	25	12
Total	208	99

Sixty (29%) of the respondents gave a large assortment of reasons why they were in business for themselves which could not be categorized into any broad, concrete ideas. The following are a sampling of such reasons: "to exploit my skill," "to save my family's face," "to serve humanity," "love of architecture," "I didn't go to school," and "because my father was in business."

In another question where respondents were asked why they did not work for government or someone else, monetary concerns (pay was too low) were cited 21% of the time, while lack of freedom was cited 15% of the time. But there were 107 (51%) responses that were so varied that they could not be categorized clearly. And 25 (12%) did not respond to this question. It appears that there are many more reasons why Uganda entrepreneurs aren't working for government or someone else than why they are in business for themselves. However, monetary concerns seemed to be more dominant than self-control concerns.

Interestingly, the common belief that autonomy, freedom, and independence are available more for the entrepreneur than for the employee was very widely held. When asked about the ways in which owning one's business was better than working for someone else (see Table 3a), an entire 61% (127 respondents) cited independence. Better pay was cited by only 20%, less than half of the number that cited independence. This might mean that Uganda entrepreneurs are more sure about the self-control in the entrepreneurial sector than about its superior pay. Nevertheless, it is financial rewards (making a living) that get emphasized when Uganda entrepreneurs are asked why they are working for themselves.

Table 3

Why Uganda Entrepreneurs Remain Entrepreneurs

a. In Which Ways is Owning a Business Better Than Being an Employee?

Reasons	No.	%
Independence	127	61
Better Pay	42	20
Others	37	18
No Answer	2	1
Total	208	100

b. Would you Consider a Job Which Pays the Same as Your Current Business?

	No.	%
Yes	48	23
No	145	70
No Answer	15	7
Total	208	100

What will happen if Uganda's circumstances (economic and political) continue to improve, if government and corporate jobs become plentiful? How will entrepreneurship be affected? To explore this area respondents were asked, "Would you consider a job which pays the same as your current business?" As shown in Table 3b, only 48 (23%) respondents would consider a job of similar monetary rewards as their current business. An entire 70% (145 respondents) would not consider such a job. The reluctance to consider a job may have to do with the extras entrepreneurship gives besides income. As we just stated, one such extra well known to the Uganda entrepreneur is independence of action.

Probably Uganda's current entrepreneurs will not and cannot be expected to abandon their businesses and seek jobs even when they exist and their remuneration is reasonable. But what about tomorrow's would-be entrepreneur? If monetary rewards continue to be emphasized (and there is no reason to feel that this will be the case), then jobs which pay well will lure would-be entrepreneurs away from entrepreneurship. However, tomorrow's would-be entrepreneurs are today's children, especially the children of Uganda's current entrepreneurs. The involvement of children in the family business has a lot to do with whether the children take up entrepreneurship when they grow up. In another section we present the findings related to family involvement.

Risk Taking

Going into business for oneself is always a risky decision because one can never totally eliminate the possibility of failure. Several questions on the questionnaire centered around failure. Table 4 summarizes respondents' opinions about failure. Although only 53 (26%) respondents had ever experienced own business failure (Table 4a), a much larger number of them, 157 (76%.), knew somebody whose business had failed in the past (Table 4b). So, business failure is not exactly a strange, vague idea, but a real possibility for those who venture out on their own in the business world in Uganda and anywhere.

Table 4

Awareness of Risk of Failure

a. Have You Ever Had a Business Which Failed?

	No	%
Yes	53	26
No	145	70
No Answer	10	5
Total	208	101

b. Do You Know Anybody Whose Business Failed?

	No.	%
Yes	157	76
No	36	17
No Answer	15	7
Total	208	100

Respondents were, therefore, asked what they would do if their businesses failed. As seen in Table 5a "try again" was the response of the majority (51%). This is consistent with the findings we have already stated. Only 38 (18%) respondents indicated that they would look for jobs if their businesses failed. The bias for trying again after a business failure was revealed again in responses to two other more focused questions. The question, "If your business failed, would you look for a job?" resulted in more negative responses (47%) than positive responses (41%). On the other hand, the question, "If your business failed, would you try again?" resulted in an overwhelming affirmation (78%), with only 12% answering negatively (Table 5b and c).

Table 5

Response to Risk of Failure

a. What Would You Do If Your Business Failed?

	No.	%
Look for Job	38	18
Try Again	105	51
Cultivate (peasant farming)	22	11
Other Possibilities	24	12
No Answer	19	9
Total	208	101

b. If Your Business Failed, Would You Look for a Job?

	No.	%
Yes	85	41
No	98	47
No Answer	25	12
Total	208	100

c. If Your Business Failed, Would You Try Again?

	No.	%
Yes	163	78
No	25	12
No Answer	20	10
Total	208	100

Cross tabulations showed that those who had ever failed were much more (71%) prepared to try again than those who had never failed (50%). It was also found, through cross tabulations, that 80% of those who would prefer to look for jobs if their businesses failed were still open to trying another business again. On the other hand, only 34% of those who would prefer trying again if their current businesses failed were still open to looking for a job. These findings are very consistent with those of other researchers. Albert Shapero, for example, basing himself on many studies on entrepreneurs in many countries, developed and underdeveloped, states: "When entrepreneurs are asked what they would do if they lost their companies, they almost always answer, "Start another company," (Shapero, 1985).

Family Involvement

"Entrepreneurs beget entrepreneurs" is probably as good a saying as anyone can find in social phenomena. That entrepreneurs tend to come from families with entrepreneurial parents has been validated in study after study (Hisrich, 1989). In this study, several respondents gave "growing up around a family business" as the reason why they are in business for themselves. Growing up around a family business implies that family members involve themselves in the affairs of the family business. This is how a family business promotes entrepreneurship.

Several questions on the questionnaire solicited information about the involvement of family members in the family business. Table 6 shows the responses 'to the questions. As can be seen in Table 6a, 104 (50%) of the surveyed entrepreneurs came from families with entrepreneurial parents. If we include respondents who had other relatives (other than parents) who owned businesses, then the number of respondents with entrepreneurial family backgrounds rises to 123 (59%). The number of respondents with entrepreneurial backgrounds is very high given the very low percentage of people who own businesses in the total population of Uganda. Such a number can only be explained by the tendency of entrepreneurs begetting entrepreneurs.

Twenty-four of the surveyed entrepreneurs got their businesses from their parents (Table 6b).

Table 6

Family Involvement in Parents' Business
a. Was Your Father or Mother Engaged in Business?

	No.	%
Yes	104	50
No	96	46
NoAnswer	8	4

Total	208	100

b. Did You Get Your Business From Your Parent(s)?

	No.	%
Yes	24	12
No	150	72
No Answer	34	16
Total	208	100

c. Did You Work in Your Parents' Business?

	No.	%
Yes	59	28
No	72	35
No Answer	77	37
Total	208	100

Another 16 respondents got their businesses from other relatives (Table 7b). Thus, 40 (19%) respondents got their businesses from parents and other relatives. They are still operating the businesses. These numbers are much higher than they would be in the United States where many parents sell their businesses when they retire and where offsprings who inherit businesses mostly prefer to sell them. All this is possible in the United States because there is an active market for existing small businesses. There does not appear to be a market for existing small businesses in Uganda. None of the respondents had bought his/her business from anybody. If indeed there is no market for existing businesses in Uganda, and it needs to be investigated, it is not a good sign for the advancement of entrepreneurship. For one thing, the "buying existing business" route to entrepreneurship remains unavailable. In the U.S., 28% of business owners bought their businesses (Cooper, 1986). Second, a parent who doesn't want to give/gift his/her business to a relative will probably still have to, unless the option of abandoning the business is considered preferable. Moreover, realizing his/her dilemma, he/she may turn the business into a cash cow to be milked until abandoned.

Table 7

Family Involvement in Other Relatives, Business

a. Did Your Other Relatives (not parents) Own a Business?

	No.	%
Yes	156	75

No	44	22
No Answer	8	4
Total	208	101

b. Did You Get Your Business From Other Relatives?

	No.	%
Yes	16	8
No	141	68
No Answe	51	25
Total	208	101

c. Did You Work in Other Relatives, Business?

	No.	%
Yes	40	19
No	123	59
No Answer	45	22
Total	208	100

Working in the family business is a major way to prepare oneself to take over the family business or to get into some other kind of business (Gundry, 1993). As can be seen from Table 6c, 59 respondents (28%) worked in their parents' businesses. Another 40 respondents (19%) worked in other relatives' businesses (Table 7c). Cross tabulations showed that respondents who had worked in their parents' businesses were not only likely to go into business themselves, but were also more likely to go into similar lines of business as their parents. Twenty-nine percent (29%) of the 104 respondents whose parents had businesses went into the same lines of business as their parents. However, if the respondents had worked in their parents, businesses, the number of the respondents who went into similar lines of business as their parents rose to 46%.

SUMMARY AND CONCLUSIONS

When asked why they are in business for themselves and why they are not working for government or somebody else, most Uganda small business owners emphasized "making a living." They are better able to make a living as entrepreneurs than as employees. While making a decent living is an important goal for entrepreneurs all over the world, independence of action accorded by being one's own boss has been routinely found to be the leading motivation for most entrepreneurs. The Uganda entrepreneurs' emphasis on monetary concerns may be merely a reflection of Uganda's current economic situation.

After 20 years of civil wars, paid employment is not only scarce, but it also doesn't pay enough to just survive. An unascertainable number of the surveyed entrepreneurs were also doubling as government civil servants. Entrepreneurship was intended to supplement their low payingjobs.

Probably the vast majority of Uganda small business owners are not in business to become millionaires (very wealthy), but just to make a living. However, while making a living as entrepreneurs, they also like the independence owning a business allows them. The vast majority of the surveyed Uganda entrepreneurs are very much aware that employees do not generally have this kind of independence. Indeed, when asked whether they would exchange their businesses for jobs that pay similarly as their businesses, the vast majority of them answered with a resounding no.

As elsewhere, small businesses in Uganda fail in vast numbers. Twenty-six percent (26%) of the surveyed entrepreneurs had ever experienced a failed business. And 76% knew of a person whose business had failed. However, as true entrepreneurs, they aren't daunted by this great potential for failure. If their businesses failed, the majority of the surveyed entrepreneurs will more readily try another business than seek jobs.

One hundred and four (50%) of the 208 surveyed Uganda small business owners came from families where parents owned businesses. The tendency that entrepreneurs come from entrepreneurial family backgrounds is, therefore, valid for Uganda too. Twenty-four (23%) of the 104 business owners whose parents had businesses actually got their businesses from their parents. This relatively high percentage reflects two possibilities. First, it may reflect parents who encourage their children to be involved in the family business, thus, making the children learn the "ropes." Second, it may also reflect parents who pass their businesses to their children partly because they cannot sell the businesses and children who run the businesses they inherit partly because they cannot sell those businesses. The first possibility mentioned above is an unqualified positive sign for the future of entrepreneurship in Uganda. The second possibility is potentially adverse to entrepreneurship. Without selling businesses, potential entrepreneurs cannot buy them. Buying existing businesses is one of the popular routes people take to become entrepreneurs. Without selling and buying businesses, some people may never become entrepre neurs. Also, without the possibility of selling your business, it may not be attractive enough to make long-term investments in that business since you may never be around to recoup the financial outlays.

A worthwhile research topic on Uganda entrepreneurship is to assess the existence of the market for small businesses. If indeed no market exists, what are the reasons for this? It may turn out that many of these reasons have to do with culture. Accordingly, Uganda's model of entrepreneurship and its development may contain unique features, not selling family businesses being one of them.

In passing, the limitations of this study should be pointed out. The sample used in the study was biased in two major ways. First, it was biased towards business owners who were prepared to be open to a nosy outsider, even though his assistants were always local people. There is no way of telling whether the business owners who volunteered to complete the questionnaire were those who ran their businesses more efficiently and/or those who considered it to be politically safe to be open. In many areas access to business owners was through the RCs (Resistance Councils), a pseudo local government system. Some RCs were adamantly against the study, others reluctantly agreed to it, and still others gave it their support. Another bias in the study is that it concentrates on urban areas and even here, on only two urban centers--Kampala and Masaka. It is inevitable that the picture painted in this paper about Uganda entrepreneurship is far brighter than what it could possibly be for the entire country. For example, the long list of obstacles to entrepreneurship in Uganda, which Salvatore Olwoc, the Uganda small business researcher and consultant, listed in his book "How to Start a Small Business in Uganda" (Olwoc, circa 1988), does not squarely and entirely apply to entrepreneurship in Kampala and possibly Masaka.

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DEALING WITH DIVERSITY: COMMON GROUND

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ABSTRACT

The theme of this years conference is dealing with diversity. How do we deal with owners, employees, and student consultants with increasingly diverse racial, ethnic, and religious backgrounds?

Dealing effectively with diversity must begin with the classification of common ground. If we wish to build a stronger country, we must first analyze and strengthen the bedrock on which we will build. We must understand and evaluate our model of success. What are the parameters that drive it? What does it take to be successful in our free enterprise system? What should it take? This article uses results from the authors' research to help clarify our common ground. The subjects were successful business leaders. Based on this research, the authors are convinced a common ground does exist. They present fifteen major parameters that they suspect drive our business success model. Given the freedom to make decisions, act, and accept consequences, widespread mastery of these fifteen parameters by our citizens may lead to higher levels of prosperity. Importantly, they appear to be teachable and trainable. We can help others learn about these parameters and how to employ them in our free enterprise system.

While much work remains to identify a final list of success parameters, their meanings and interrelationships, we can learn much by sharing what we know now. We can point out the business failures resulting from poor application of these parameters. We can give examples of successes related to their mastery. The small business counseling process gives us many opportunities to help students and business owners explore our society's model for business success. If we deal explicitly with our common ground, we will learn more about it. As we learn more, we will be better able to deal with diversity.

INTRODUCTION

The theme of this years conference is dealing with diversity. How do we deal with owners, employees, and student consultants with increasingly diverse cultural and educational backgrounds? Our answer is twofold. First we must clarify common ground--shared goals, shared ambitions, and essential rules of the game. Second, we must allow our people the freedom to build upon this common ground and blaze their pathways to success. Common ground and freedom are the leavening agents of free enterprise. They alter and transform diverse ingredients to give rise to innumerable business "success stories." These successes build the strength of our free enterprise system and contribute to the betterment of humankind. If we wish to deal effective with diversity in business, we must clarify common ground. Then we must infuse our free enterprise system with common ground values and empower each of our citizens with the individual freedom to build for better tomorrows.

Common ground is more basic than the decision tools introduced in business school survey courses. Common ground is fundamental and indispensable--a shared success model guiding our actions. It is the foundation on which we build the technology of cooperation that defines a prosperous business community and a viable society. If we wish to contribute, we must have profound knowledge of our common ground.

Infusion of common ground values involves three stages. First, the individual must identify what he or she wants from life. Second, the individual must understand what this country has to offer that will satisfy his or her personal growth an aspiration goals. Third, the individual must learn how to design an effective career strategy--one that will allow construction of a successful life on our society's common ground. We can help if we are willing to anticipate the questions and the uncertainties. We can help if we are willing to accept the roles of listener and mentor. If we wish to build our free enterprise system, we must help those who are new to its workings to understand its common ground. After that, we can support the struggles of each novice to build on this foundation. What we can offer is acceptance and encouragement as they take positive steps to create an identity for themselves and to achieve success on their own terms.

Freedom is the opportunity to make decisions, act, and accept the consequences of our actions. It is the opportunity to imagine and to strive. In this sense, freedom is freedom to fail as well as freedom to succeed. To learn the lessons of success a person must be empowered to make important decisions and to take important risks. This implies that our role is not to think for those we serve. Our role is not to shelter them from every conceivable harm. Rather, our role is to share what works for us. We can offer a proactive learning process. One that allows the novice to explore our free enterprise system's common ground and gives guided practice at making decisions and dealing with consequences.

Dealing effectively with diversity must begin with the clarification of common ground. If we wish to build a stronger country, we must first analyze and strengthen the bedrock on which we will build. We must understand and evaluate our model of success. What does it take to be successful in our free enterprise system? What should it take? This article uses results from the author's research to help clarify our common ground. The subjects were successful business leaders. Based on this research, the authors suspect that there are fifteen major parameters driving our society's model for business success. Given the freedom to make decisions, act, and accept consequences, widespread mastery of these fifteen parameters by our citizens may lead to higher levels of prosperity. Importantly, they appear teachable find trainable. We can help others learn about these parameters and how to employ them in our free enterprise system.

Much work remains to identify a final list of success parameters, their meanings and interrelationships. Elsewhere, we review the methodological challenges in depth. (Ames & Kushell, 1994) As we learn more, we can help more. For now, the fifteen parameters are thought provoking. Do they offer a comprehensive, shared set of values to guide business dealings in an age of diversity? How many business failures have resulted from poor application of these parameters? How many successes relate to their mastery?

RESEARCH

Our research question was, "Is there a workable consensus among successful business leaders about how to excel in leadership roles and achieve success in our free enterprise system?" We set two general goals for our research. First, we wanted to begin the task of documenting what today's successful business leaders think it takes to achieve leadership success in our free enterprise system.

Second, we wanted to find out if there is a workable consensus among the successful about what guiding principles and related practices to master. Will successful leaders describe a common ground?

We began our formal research by surveying the literature for all of the principles and practices we could-find. There is no shortage of anecdotal opinions about what it takes to excel. We found a total of 118 principles and practices mentioned in the works of five categories of authors: (1) actual leaders, (2) management theorists and researchers, (3) popular, "self improvement" writers, (4) critical thinkers, and (5) value researchers (See Table 1).

The writers included such diverse individuals as: John Adair, Maya Angelou, Joseph Badaracco, James Ball, Joe Batten, Warren Bennis, Kenneth Blanchard, J. Douglas Brown, William Cohen, Phillip Crosby, Stephen Covey, Max De Pree, Richard Ellsworth, Ferdinand Fournies, J. Paul Getty, Napoleon Hill, Dennis Kimbro, John Harvey-Jones, Abraham Lincoln, Og Mandino, Fred Manske, Douglas McGregor, Akio Morita, Burt Nanus, Ted Nicholas , Norman Peale, Plato, Robert Schuller, Lao Tzu, Sun Tzu, Roger von Oech, Denis Waitley, Art Williams, Kim Woo-Choong, and John Wooden.

Next, we devised a study to test the five lists. We created an open-end instrument and a study design to support it. The task we gave respondents was, "Identify and explain up to three factors, values, or qualities most important to your leadership effectiveness. Include practical examples (very help-ful)." This open-ended question left the task of defining leadership benchmarks up to the CEOs and "forced" them to set priorities. We anticipated that asking for practical examples would clarify the meaning of the CEOs' responses.

The next step was to devise a scheme to collect primary data from several chief executive officers. Our intent was to seek a broad, representative group of respondents and, under a common set of ground rules, focus their responses on our topic.

The population was defined as chairmen, chief executive officers and presidents of companies on national lists of top reformers. Also included were business award winners. This population is a cross section of successful business leaders from the United States of America--men and women of diverse racial, ethnic and religious backgrounds. They come from all geographic regions and work in many different industries. Some lead public companies that are household names like Albertsons, ADP, ARCO, Comcast, Eastman Kodak, 3M, and United Airlines. These are companies included in the Forbes 500's and Forbes 200 (best small). Others lead fast-growing, smaller companies whose names may be less familiar, but are included on annual lists of top performers -- the INC. 500, Black Enterprise Industrial/Service 100, and the Hispanic Business 500. Also included are outstanding business owners who have received awards.

Individuals honored by the U. S. Small Business Administration, National Association of Women Business Owners, Committee of Two Hundred, and many other groups. In the end, our population totaled thirty-five hundred leaders.

We used a 100 percent sample. Every leader included in our population was invited to contribute his/her views on the study question as a one page business letter. We went to great lengths to personalize the process, stress its importance and follow-up. The appeal was to "describe to teenagers what it takes to achieve leadership success in our free enterprise system." We promised to publish their responses in a book "which will make a difference in the lives of many young readers." (Ames, 1994) One hundred and twenty-seven leaders responded, a response rate of 3.6%. We have extensive data on our respondents and their companies and we are generally pleased with the diversity as to gender, ethnicity, age, industrial classification, and company size. However, we do not have complete background information on nonrespondents. Our information on the population is far from complete, particularly for smaller, privately held companies. Lacking hard data, we are left with impressions about representativeness. For example, our list of respondents includes a much higher percentage of women than the population. The content of their responses does not appear to differ significantly from that of the men's responses. Blacks and Hispanics are proportionately represented. The content of their responses does not appear to differ significantly from the rest of the respondents. No Asian Americans chose to respond.

Next we considered several evaluation schemes. While none are entirely satisfactory, the schemes for thematic content analysis suggested by the consumer researchers seem the best. Holbrook (1977), Kassarjian (1977), Kolbe and Burnett (1991), Perreault and Leigh (1989), and Weber (1990) review these schemes. Following the recommendations of these researchers, four independent judges reviewed the responses (including the two authors). They used worksheets containing five checklists. These checklists contain our 118 principles and practices (called "themes" or "decision items" by consumer researchers), divided into our five categories (see Table 1). The judges were trained concerning the meaning of each benchmark.

To get a better handle on the CEO's priorities, we added a twist to the conventional thematic content analysis approach. The worksheets offer three choices for each theme, instead of just asking whether or not the theme appeared in the letter. The three choices are: (1) make no check mark if the theme is not mentioned in the letter, (2) place a check mark in the "mentioned" column if the theme is mentioned in the letter, or (3) place a check mark in the "very important" column if the theme is stressed as very important in the letter. Later we used a scoring system ("0" for not mentioned, "1" for mentioned and "2" for very important) to experiment with ranking the themes.

Judges also had space to describe themes in the letters that were not include on the five checklists. They could categorize their write-ins as "mentioned" or "very important." Very few write-ins proved necessary.

Next we tested for reliability. Reliability in thematic content analysis refers to categorical and interjudge reliabilities. After evaluating several "agreement indexes," we choose to report the coefficient of agreement. This index tests for interjudge reliability. It is the index most frequently used by consumer researchers. (However, this does not mean we endorse it for future studies. As we discuss elsewhere, work needs to be done on indexes to address the needs of researchers who are trying to cope with complex topics like success factors. (ABBBB)

To check interjudge reliability, we calculated coefficients of agreement for each pair of judges, for each item, for each checklist, and for all themes. A coefficient of agreement is the total number of agreements divided by the total number of coding decisions. Table 2 summarizes some of these coefficients. By the standards of consumer research, these coefficients are acceptable.

Table 1

118 Principles and Practices Found in Writings About Leadership

(1) Writings of actual leaders:

1.* Decide what it is you really care about.
2.* Think big.
3.* Focus on giving not getting.
4.* Know the work.
5.* Commit yourself.
6.* Accept responsibility for accomplishing the goal.
7.* Accept responsibility for your group.
8.* Involve others.
9.* Select your people rigorously.
10.* Get people excited about your goal and the PLAN.
11.* Have high expectations for yourself and your group.
12.* Take Charge.
13.* Don't just give orders and expect people to follow them.
14.* Keep at it.
15.* Build teams that know how to do the whole job.
16.* Keeping score Is very important.
17.* Be there.
18.* Have a winning attitude.
19.* Say what you mean and do what you say.
20.* Have a bias for action.
21.* Give credit when it is due.
22.* You open the door to the future by challenging the way things are now.
23.* You succeed by helping others succeed.

(2) Writings of Management Theorists and Researchers:

1. Adjust your leadership style to match the situation you face.

2. Change the organizational situation to fit your leadership style.
3.
   A. Make desirable and achievable rewards available to organization members as a result of attaining organizational goals.
   B. Clarify the kinds of behavior that must be performed to achieve desirable and achievable awards which are available to organizational members.
4. Inspire organizational success by affecting your peoples' beliefs in what the organization should be, as well as their values like justice and integrity.
   A. Work to create a sense of duty In your people.
   B.* Encourage new ways of handling problems.
   C.* Promote learning for all your people.
   D.* Inspire your people.
   E. Make your people aware of organizational Issues and their consequences.
   F. Help your people understand the high-priority Issues facing your organization and what will happen If they are not faced successfully.
   G.* Create a vision of what the organization should be.
   H. Build commitment to that vision throughout the organization.
   I. Facilitate change throughout the organization to support that vision.
   J.* Communicate vision throughout the organization.
5.* Build trust between yourself and your people.
   A.* Show and express confidence in your people.
   B. Be completely open about why important decisions are made.
   C. Demonstrate your competence by helping your people understand how and why decisions are made.

(3) Writings of Popular, Self Improvement Writers:

A leader must:
1.* Commit to a worthy purpose and set specific goals
2.* Constantly pursue his/her purpose and goals.
3.* Have technical and professional knowledge of the task.
4.* Have profound interest in the work.
5.* Be decisive.
6.* Have integrity.
7.* Be enthusiastic (have a positive attitude about accomplishing great things).
8.* Be imaginative.
9.* Be willing to work hard.
10.* Have analytical ability.
11.* Have an understanding of others.
12.* Possess the ability to spot opportunities.
13.* Possess the ability to meet unpleasant situations.

14.* Possess the ability to adapt quickly to change (the attitude that today is the best day to pursue new opportunities).
15.* Be willing to take risks.
16.* Have good judgement.
17.* Be a motivator.
18.* Set organizational direction.
19.* Have moral character.
20.* Be courageous.
21.* Be steadfast in adversity, persevering no matter what the odds.
22. Have compassion.
23.* Be trustworthy.
24.* Be willing to learn.
25. Be religious.
26.* Have high self-esteem (see him or herself as valuable).
27. Have a sense of humor.
28.* Do his/her personal best to improve society.
29.* Be passionate about his/her work and personal life.

(4) Writings of Critical Thinkers:

A leader must:
1.* Be a critical thinker.

Exhibit the following abilities:
A. Avoid over-simplification.
B. Develop perspective: creating or exploring the Implications of beliefs, arguments or theories.
C. Clarify Issues, conclusions, or beliefs.
D. Develop criteria for evaluation: clarifying values and standards.
E. Evaluate the credibility of sources of Information.
F. Question deeply: raising and pursuing root or significant questions.
G. Generate or assess solutions.
H. Analyze or evaluate actions or policies.
I. Empathize with contending points of view before making own conclusion.
J.* Listen critically: constructing an accurate interpretation of, understanding the elements of thought in, and evaluating, the reasoning of an oral communication.

Writings of Value Researchers (This list is taken from Rokeach,1973)

Which of the following values or guiding principles are important to the author?

1. A comfortable life (a prosperous life).

2.* An exciting life (a stimulating, active life).
3.* A sense of accomplishment (lasting contribution).
4. A world at peace (free of war and conflict).
5. A world of beauty (beauty of nature and the arts .
6. Equality (brotherhood, equal opportunity for all).
7. Family security (taking care of loved ones).
8. Freedom (independence, free choice).
9. Happiness (contentedness).
10. Inner Harmony (freedom from inner conflict).
11. Mature love (sexual and spiritual intimacy).
12. National security (protection from attack).
13. Pleasure (an enjoyable, leisurely life).
14. Salvation (saved, eternal life).
15.* Self-respect (self-esteem).
16.* Social recognition (respect, admiration).
17. True friendship (close companionship).
18. Wisdom (a mature understanding of life).

According to the author, which of the following must a successful leader be?

1.* Ambitious (hard working, aspiring).
2.* Broadminded (open-minded).
3.* Capable (competent, effective).
4.* Cheerful (lighthearted, joyful).
5.* Clean (neat, tidy).
6.* Courageous (standing up for your beliefs).
7. Forgiving (willing to pardon others).
8.* Helpful (working for the welfare of others).
9.* Honest (sincere, truthful).
10.* Imaginative (daring, creative).
11. Independent (self reliant, self-sufficient).
12.* Intellectual (intelligent, reflective).
13.* Log al(consistent, rational).
14. Loving (affectionate, tender).
15. Obedient (dutiful, respectful).
16. Polite (courteous, well-mannered).
17.* Responsible (dependable, reliable).
18.* Self-controlled (restrained, self-disciplined).

Table 2

Coefficients of Agreement

Judge Pairs					
1-2	1-3	1-4	2-3	2-4	3-4

Checklist (1)	88.06	81.11	80.89	83.24	85.09	84.92
Checklist (2)	89.02	86.55	89.52	84.08	85.88	86.14
Checklist (3)	83.95	87.02	86.81	87.14	87.52	83.66
Checklist (4)	82.28	86.56	91.52	87.17	90.60	84.57
Checklist (5)	87.07	86.97	86.46	86.81	85.99	84.83
Combined	86.51	85.80	86.60	85.77	86.58	84.83

In our study we wanted to find out if we could identify major principles and related practices representing "factors" or "clusters" of the 118 we found in the literature. The judges agreed subjectively that we could identify fifteen. These themes and related subthemes are presented in Table 3. However, our ability to objectively define the significance and relative importance of the 118 principles and practices is not yet satisfactory. Nor are we happy with the subjectivity of the clustering procedure. Our simple scoring system did help the objectivity of our clustering. In Table 1, themes with higher scores (higher in frequency and/or importance) in the combined view of the judges are asterisked (*). We calculated these scores by adding up the "O"s, "1"s " and "2"s from the worksheets. Themes without asterisks rarely appear in the responses.

Table 3
Fifteen Major Themes

Major Themes	Component Subthemes
Do you want to be successful? Here's how:	
(1) Understand what the rewards are.	5-A-3, 5-A-15, 5-A-16
(2) Commit to enterprises that will allow you to earn these rewards.	1-1, 1-5, 3-1 (first part), 3-4, 3-29, 5-A-2
(3) Be Courageous	1-6, 1-14, 3-13, 3-20, 3-21, 5-B-6
(4) Be Capable	1-4, 1-11, 3-3, 5-B-3, 5-B-17
(5) Work Hard	3-9. 5-B-1
(6) Be Honest	1-19, 3-6, 3-19, 3-23, 5-B-9
(7) Be Imaginative	1-22, 2-4-B, 3-8, 3-12, 5-B-10
(8) Be Broad-minded	3-11, 4-1-J, 5-B-2
(9) Work Smart	2-4-G, 3-1 (second part), 3-2, 3-18, 5-B-18
(10) Build Teams	1-8, 1-9, 1-13, 1-15, 2-4-J

(11) Give Respect 1-21, 2-5, 2-5-A
(12) Be of Service 1-3, 1-23, 3-28, 5-B-8
(13) Be Positive 1-2, 1-10, 1-18, 2-4-D,
3-7, 3-17, 5-B-4
(14) Think and Learn 2-4-C, 3-16, 3-24, 5-B-12,
5-B-13

Are you worried that you might not qualify for the race?

(15) Try Anyway! 1-12, 3-5, 3-15, 3-26

In this kind of "forced choice" study we can learn a great deal by studying what is not mentioned. Several principles and practices are notable for their almost total absence in the CEOs' responses. Consider Checklists (2) and (4) in Table 1. Checklist (2), Writings of Management Theorists and Researchers, attempts to summarize themes from academia about what it takes to be an effective leader. Checklist (4), Writings of Critical Thinkers, lists themes related to critical thinking. Several themes from these two checklists are rarely mentioned (no asterisk in Table 1). the respondents clearly consider many themes from these two checklists to be less important than themes from the other checklists. This is startling given the importance attached to these themes in certain circles. Will this pattern hold true in future research? If so, why the discrepancy?

CONCLUSION

If we wish to deal effectively with diversity, we must clarify common ground. We must infuse our society with common ground values and empower each of our citizens with the Individual freedom to build for better tomorrows. Dealing effectively with diversity must begin with the clarification of common ground. If we wish to build a stronger country, we must first analyze and strengthen the bedrock on which we will build. What does it take to be successful in our free enterprise system? What should it take?

This article has explored these questions. At this point in our research with successful business leaders, we are convinced that:

(1) A common ground does exist. It is a success model. We suspect that fifteen major parameters or "values" drive our society's model for business success.

(2) Given sufficient freedom of action and support, most of our population can build personal success on this common ground. We are optimistic they can do this without losing their cultural identity.

Most of the success model's parameters appear transcultural. They express ideas valued by many cultures. There are important exceptions. However, before we assume that these exceptions will prevent cooperation and teamwork, we need to remember what it is that increases the diversity of our population. We live on what some immigrants call the "golden mountain." Our immigrants and our youth seek opportunity and desire success. They want to homestead the common ground. Once they understand the essential rules of the game, they will build well. The resulting community will be delightful in the varied styles of architecture and strengthened by its common foundation.

(3) The benefits of infusing our diverse society with common ground values will be enormous. We see wide gaps between best practices described by successful business feeders and typical practices. Many improvements are possible in the application of the parameters of the success model.

(4) The process of defining the parameters of the success model operationally and infusing them in our population will be very challenging. Despite past successes, we do not fully understand the parameters of our success model. Nor do we know how to best infuse these values in our population.

There is still much work left to do. To get it done we must start. We need improved understanding of our society's success model before we can cope adequately with the challenges of diversity. The major parameters must be explored and clarified. For examples our research with successful business leaders suggests that some of our favorite academic theories about how to be a successful business leader may not address what is important. The common ground appears to lie elsewhere. It needs to explored out with further research using improved research methodologies.

While this work goes on we still have to teach and train today. For now, the fifteen parameters found in our research may provide some guidance. They appear teachable and trainable. Perhaps they are a good initial definition of the comprehensive, shared set of values we need to guide business dealings in an age of diversity. We can parameters and encourage their lives. We can guide in our free enterprise system. While much work remains to further clarify the meanings and interrelationships of these parameters, we can learn much by sharing what we know now. We can take a fresh look at business failures. How many have resulted from poor application of these parameters? We can rethink our favorite examples of business success. How many are related to mastery of these parameters? The small business counseling process gives us many opportunities to help students and business owners explore models for success. It we deal explicitly with our common ground, we will learn more about it. As we learn more we will be better able to deal with diversity.

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Managing Diversity Through Training and TQM Programs

by Dole Krueger

Abstract

In analyzing diversity in the labor force this paper addresses the problems facing small and large businesses as the U.S. labor composition changes. At the same time the labor force composition is changing a gap appears to be developing between the skills required for many jobs and the level of skills offered by new entrants. This paper reports on the diversity problem pointing out that employers have introduced training programs to develop skilled employees, but possibly for many businesses the cost of improving employees basic skills prevents them from improving quality and productivity particularly with small businesses. In addition, this paper reports on labor force diversity and shows how to evaluate training programs particularly Total Quality Management. For small business TQM is an option, but the cost appears prohibitive for most small businesses. However, the audit can provide appropriate feedback for small business for incorporation into their business plan. Furthermore, the paper addresses the possibility of setting up cooperative arrangements for small businesses in order for small businesses to participate in the training and the TQM challenge.

Introduction

As the U.S. economy moves toward the 21st century, businesses in the U.S. face challenges that they have never encountered. In fact, according to some projections the demand for skilled labor outstrips a dwindling supply [11].

Since 1970 birthrates in almost every industrialized national have dropped below the level required for a country to replace its population [12]. Future labor shortages are on the horizon. At the same time the composition of the labor force is also changing, and an alarming wide gap appears to exist between the jobs and the skills required to perform the job [4]. New entrants into the labor force not only do not have appropriate entry level skills, but because of increased global competition, changing technology, new management programs, the current employed worker needs retraining [5]. As a result the magnitude of managing these diverse problems for small and large firms becomes critical to their success.

The first part of the paper's purpose spells out the diversity that all businesses both large and small face in identifying and in dealing with the present and future diversity of the labor force. The second part of the paper specifically addresses how out present cultural diversity and education deficiencies effects small and large businesses. Thirdly, to provide a specific analysis on how these diverse problems affect managers of small and large business, the paper assesses and evaluates the impact that diversity has on Total Quality Management. A program that challenges our traditional ways of managing a firm, but offers a possible solution to managing labor force diversity.

The Diversity Problem

The problem of human capital has a number of dimensions. The composition of the labor force continues to change which in turn draws attention to the mismatch between the skill level of workers and jobs. Furthermore, in a number of recent articles the U.S. educational shortcomings are seen as a threat to the U.S. ability to remain a major force in the global market place [14]. In 1992, Fortune Magazine polled American businesses, ninety eight percent of the respondents expressed concern about the problems in our education systems [13]. Another survey of 402 companies indicated that 80% of their employees need writing skills and 62 percent indicated a need for help with communication [15]. More specifically, 41% of the respondents listed reading comprehension as a needed skill while 40% listed math skills, to correct writing problems 21% of the firms after training in writing skills and 42% offer interpersonal communication training. In contrast, many other firms rather than concentrating on reading writing and math training focus more on management and leadership, computer proficiency, and customer service.

What are the reasons for basic skill problems. In 1988 a special report in Business Week drew attention to the changing cultural patterns in U.S. society [11]. One fourth of our children are born out of wedlock and one fourth of our children are on welfare at some point in their lives. Survival not education becomes the priority.

What implications do these patterns have on business. In 1983, 86% of the labor market was dominated by white males and females [1]. By year 2000 56% of the white male and female population is projected to dominate the labor market while 43% of the labor market entrants constitute minorities [1]. According to Business Week's special report section, three quarters of the nation's new workers will have limited verbal writing skills, and yet, they will compete for 40 percent of the new jobs [1]. In the same article, Nynex tested 60000 job applicants in order to hire 3000. More recently, Pacific Telesic: reported 60 percent of their job applicants failed a pre-employment test that measured the equivalent of seven grade skills [3].

Besides skill deficiencies many workers are displaced by technology. According to recent study most of the jobs that disappeared came from factory occupations paying the lowest wages, while significant job growth came from executive administrative, managerial, and professional categories [10]. These categories grew by 3.29 million. Therefore, technology and downsizing may have the effect of displacing workers, and as recent labor force statistics indicate, not all the employment growth comes from low skilled occupations in the service center.

Whether jobs are being skilled up or whether demand for executive, administrative, and professional jobs are up is difficult to answer, but the impact of these diverse findings on small and large business can not be underestimated [8].

For businesses to improve quality and productivity through continuous quality programs of other forms of training requires overcoming the diversity and social-cultural problems present in our society. Just managing current labor force diversity through proper selection and training becomes a major hurdle for many large corporations and for almost 80 wall businesses. Allocating resources for training employees in reading, writing, math and interpersonal skills becomes difficult and involves extra cost. However, without solving and managing these diverse problems small businesses face a significant constraint on future growth and future productivity. To remain competitive and to manage diversity many businesses are attempting to adapt to the changing economic environment by lumping on the trend toward producing a quality product through Total Quality Management. The reports of success appear substantial, but the implementation and success of these programs entail vast changes in a firm's culture, leadership, management style, and customer service functions [2]. Initial costs are high, but rewards appear to follow.

Many recent articles and books support Total Quality Management [5]. In fact, the Baldridge Award in the U.S. recognizes and encourages businesses to implement Total Quality Management [5]. As a result many major companies have joined the quality movement. Although many firms have joined the quality movement evidence has surfaced that not all the companies benefit from the quality challenge. A study by the American Quality Foundation and Ernst & Ernst found among 500 organizations that some organizations particularly from medium and low wave industries did not benefit from TQM particularly benchmarking [8]. There a number of possible reasons for then poor quality program results.

Many firms have adopted TQM not realizing what TQM entails. What happens if you do not stress quality. First, 99.9% quality means:

99.9% QUALITY MEANS:

-1 hour of Unsafe Drinking Water Every Month

-2 Unsafe Plane Landings per Day at O'Hare

-16,000 Pieces of Mail Lost by USPS Every HOUR (Current USPS rate; 98% - 320,000 lost per hour)

-20,000 Incorrect Drug Prescriptions a Year

-500 Incorrect Surgical Operations per Week

-50 Newborn Babies Dropped at Birth by Doctors Everyday

-22,000 Checks Deducted from the Wrong Bank Account Every Hour

-32,000 Missed heartbeats per Person per Year

Second, many firms try these quality tools without changing the management culture. Thirdly, managing a diverse labor force, dealing with the skill deficiencies and working around labor shortages presents barriers for companies trying to implement successful quality management.

For those firms that do adopt the quality program another question arises. How does a company know whether its continuous quality improvement program works? An appropriate assessment model and audit process can provide the necessary feedback to determine the success of training programs that help manage diversity. For small business this audit becomes part of the business plan.

Given these three constraints it is possible that many firms do not have the resources to carry out a TQM program or any continuous improvement process. Training employees in reading, writing and interpersonal skills is not within their scope of their responsibilities, let alone teaching statistics, leadership, management styles, computer skills and customer service functions. For small business the problems associated with skill deficiencies with labor shortages and with the training of minorities is not within the scope of their abilities and resources. Small businesses need special help. According to recent reports the Clinton Administration has proposed a 1.5% tax on those businesses that do not spend at least 1.5% on training. For small businesses the tax may have the effect of increasing costs. However, 1.5% spent an training for a small business probably can not produce sufficient change within the business. Fair example 1.5% of a $500,000 business amounts to only $7,500. Given the magnitude of the trainng required to produce a successful TQM program at any other training designed to improve productivity $7,500 isn't sufficient.

Quality Assessment and Audit Procedures

Today, the Total Quality Management or continuous improvement program has challenged our traditional business framework of planning, organizing, controlling and leading. These functions formerly embraced only management, employees were left outside the process. Today, this traditional approach has given way to a philosophy that promotes total management commitment, teamwork, and training from the top of the firm to the bottom of the firm.

There are two principal purposes that this paper on quality assessment and audit procedures achieves. In extending the total quality message to the culture and to the leadership of the organization the necessary change requires a quality plan and a different system of management. Managers and bosses have to become leaders, coaches, and facilitator. Rather than controlling and micro managing, managers have to empower employees by sharing and by aligning the firm's distributing vision and strategy with the quality program. Hierarchical relationships have to give way to collaborating to enable team relationships to focus on quality service and the customer. Independence must give way to interdependence because Total Quality Management is not a system of ranking people nor is it a system where individuals compete one against the other. It is a system and plan of action that teaches that TQM is a never ending process of improvement for the individual, the group and the firm.

Turf building, pyramid structures, hidden agendas, distrust, fear, rigid rules and regulations, and short term goals have to be replaced with teams integrity, trust, flexibility, rapid response and long term goals that not only promote win/win situations within the company, but foster a broader goal of social and community responsibility. As the culture and atmosphere changes within an organization management focuses on the interaction of how people work together to produce excellence. Because people are different, management must develop an awareness of employee differences and use these differences to optimize each person's abilities, aptitude, interests and skills in a system that permits individuals to reinforce each other toward the achievement of the system's goals. A dynamic fluid flexible system enables firms to survive and compete globally. Consequently, management and employee commitment are necessary for teams to function properly and to enable management and employees to develop a commitment.

The Audit

The audit needs to measure and to obtain feedback in live major areas: management, quality measurement, suppliers and shippers audit, training before beginning a continuous improvement program and facilities.

Management has to establish and promote a vision and a plan to ensure success. The vision and quality theme has to include the following. The plan has to be distributed to all managers, communicated to all employees and understood by all employees. Managers must clearly agree and support quality training programs by rewriting policies and strategies to reflect the commitment to quality and training as well as changing to an appropriate organizational structure to foster continuous improvement. Verbal statements and consensus are helpful ingredients, but a clearly documented plan written end communicated is absolutely essential to acquire a customer focus and solicit employee involvement. Facilitator, statistical specialists, and formation of appropriate teams are necessary ingredients to implement the quality process. As management obtains employee support and commitment, management has to recognize employee successes and further encourage planning and preventive thinking using rewards and forms of recognition. Internal obstacles such as outdated policies and procedures must be removed while now flexible procedures are put in place not by managers, but hopefully by involved employees.

Quality Measurement

To measure quality and productivity the now teams need to formulate with the support at management and with the help of a facilitator and the following:

-Quality Manuals

-Standard Operating Procedures

-Calibration and Maintenance of Gauges for Statistical Control and Measurement

-Statistical Control Plan and Process Flow Charts

-Statistical Analysis, a Monitoring and Evaluating

-Process which includes customer feedback

To measure quality an internal review of the control processes are absolutely essential to maintain control of the process and to ensure capability.

Supplier and Shipping Audit

Suppliers and shippers have to be brought into process to ensure in coming materials meet quality standards so the outgoing product meats the quality control specifications.

A supplier audit should include the following:

-Mutually agreed upon specifications

-A formal written agreement

-Targets for critical variables for improvement

-Controls for changes

-A process for inputs from the firm to the supplier

-A documented material handling system with flow charts

The material handling system has to be in place and has to have the capability of tracing important elements through bar coding to other forms of tracing different elements in order conform to specifications and to eliminate non-conforming elements. For non-conforming items, a plan or process must be in place to permit correct action. Flow charts outlining the process are essential to meet material and product specifications, and they have to be part of the employee training process.

Training

Without training businesses have little chance for success. Training may be the most costly, but it is the catalyst for change and improvement. The types of training varies, but given the problem with diversity, training can be extensive. Possible training areas include the following:

-Reading

-Writing

-Math

-Computer literacy

-Interpersonal skills

-Leadership and management skills

-Material handling

-Customer Service

-Statistical

-Maintenance (Prevention)

-Wellness Programs

-Employer Assistance Programs

-Safety (Process & Industrial Hygiene)

The list of possible training programs to adapt to the diversity in the labor market and in the product market is extensive. For example, safety per se, is a large program considering first aid, CPR, and government regulations that cover air, water, pollution and hazardous materials. Here written procedures have to be in place for investigation and for emergency situations. Without a comprehensive training program, the success of any continuous improvement process becomes uncertain.

To avoid bottlenecks and stoppages in production while implementing a quality program the following factors need consideration:

-A Production Improvement Plan

-A Prioritizing of Capital Equipment Requirements

-A Maintenance Program

-An Environmental Protection Plan to address air, temperature, noise, lighting, waste disposal and hazardous materials.

-Government compliance requirements

-Security systems for fire, theft, substance abuse and natural disasters.

To summarize this attempt to construct a Total Quality Management audit it needs to be emphasized that the success of any quality program is measured by three variables, cost reduction, improved productivity, and a change in customer behavior. If any of these three do not show improvement the firm needs to conduct an assessment audit to determine the reasons for lack of success.

Conclusion:

Managing diversity through training and any continuous Total Quality Management program places small business operators at a disadvantage. High performance firms with resources that have selected employees with appropriate skill levels apparently can benefit from quality management programs because they have the resources and ability to select appropriately skilled employees, where as low performing companies have to manage a diverse work force that lacks appropriate skills [4]. For example, it is possible that poor reading, writing, and math skills act as a constraint on these low performing firms which in turns prevents them from receiving any benefits from TQM program or from any type of training program.

Similarly, a small firm without resources for training need outside help. Partnerships between business schools, college and universities, chambers of commerce, and government programs have to be established to defray the costs of training and managing our labor force. For example, apprenticeship programs between secondary schools and small business can help solve a firm's problem with selecting and training personnel, while colleges and universities could conduct training for small firms. Furthermore, grants from the federal government to encourage training centers may be more appropriate than a 1.5% tax. This consolidation of training spreads the cost among a number of firms. To cope with the U.S. cultural and labor force diversity a new partnership approach needs consideration and definitely needs money and resources to spread the benefits of training, quality programs among small businesses. To ascertain the needs of each organization a training and/or quality audit may uncover not only reasons why any continuous improvement program isn't working, but also identify specific deficiencies that the organization needs to address.

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EMBRACING DIVERSITY AS A NORMAL CONSTRUCT OF AN SBI PROGRAM

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ABSTRACT

This paper presents the opinions of the University of Houston-Downtown SBI faculty as supported by data from fifty-two of the cases accepted by the SBI from Fall 1992 through Spring 1994. In these two years we have successfully utilized the diverse student population of the College of Business to reach a diverse small business client population. For those of us fortunate enough to work in a racially and ethnically diverse environment, achieving diversity in the recruitment of clients is an extension of the diversity in the composition of student teams. Furthermore, the diverse composition of student teams occurs naturally with little or no manipulative action by the SBI professor.

In our experience, business students working and living in a diverse environment do not need to be told how to "deal with diversity". Instead, they need to be guided through the SBI consulting experience and the reporting of their analyses and recommendations. Thus, the most important criteria for successful case management are the organizing, monitoring, and controlling abilities of the SBI professor in developing the student's intellectual capabilities.

INTRODUCTION

The University of Houston-Downtown (UH-D) prides itself on its ability to offer quality education to a diverse student population. The College of Business (COB) within the University currently has enrollment of 43.1 percent (472) White, Non-Hispanic students; 23.8 percent (260) Black, Non-Hispanic students; 19.4 percent (212) Hispanic students; 9.3 percent (102) Asian/Pacific Islander students; 0.1 percent (1) American Indian/Alaskan Native student; and 4.3 percent (47) 'Other' students. To a large extent these percentages are reflective of the demographics of the city of Houston where most of the students live and/or work.

As an American Assembly of Collegiate Schools of Business (AACSB) accredited institution, the College of Business is recognized for its ability to provide quality education to all of its business students. Recognizing the growth of the small business sector and the increasing importance of consultants in today's market, the College emphasizes to its students practical, real-world education through participation in the SBI program.

Since Fall 1992, the SBI has accepted fifty-nine student consultant reports and increased our grant amount from seven to seventeen allocations per year. This increase occurred after reallocations of monies were distributed to UH-D each semester from Fall 1992 through Spring 1994 for projects not completed at more homogeneous student body institutions. Since our student teams consistently completed quality projects, the College of Business and the SBI felt that seventeen projects per year more accurately reflected our throughput capacity.

STUDENT TEAM DIVERSITY ISSUES

In terms of the number of students contributing projects, capacity obviously increased when the SBI project became a requirement for the core, senior-level production/operations management (POM) course instead of an elective, junior-level entrepreneurship course. Our capacity to provide a more effective approach to consulting also increased simply by the change from a junior level to senior level project. Since the mean age of a UH-D student is 25 years, and approximately 53 percent of the students attend the campus on a part-time basis, the change from a junior level to a senior level course heightened the degree of business maturity of the typical SBI student consultant.

Perhaps the maturity of the typical UH-D College of Business student is the primary contributing factor to the SBI faculty viewing each team as a group of student peers, and not as a group of students for which gender, race or ethnic diversity must be addressed. Generally, students group themselves into teams of two, three, or four individuals. Occasionally, a professor may extol the benefits of students organizing themselves into a diverse team, but students still select their own team members most of the time. The faculty's only intrusion into this team selection process is to ensure that no team is comprised of all non-native English speaking students.

The data for the past two years suggest that students may be more likely to group themselves by gender than by race or ethnicity. Indeed, the composition of teams for the fifty-two cases for which data were available shows the following gender distribution:

Table 1
Composition of Teams by Gender Specificity

	Number of Teams	Percent
Male	15	28.8

Female	13	25.0
Male/Female	24	46.2

Thus, it appears that males and females are almost equally likely to group themselves into gender specific teams. Still, non-gender specific teams emerge almost half of the time. Although arguments abound on the differences of males and females in their approach to analytical situations, we have found no evidence to support that males or females differ in their ability to consult to small businesses. The faculty's teaching methods, therefore, have not been modified for gender specific and non-gender specific teams.

In many cases, although the teams are gender specific, they are racially and/or ethnically diverse. For the same fifty-two cases accepted by the SBI over the past two years, the following specificity was noted:

Table 2
Composition of Teams by Race and Ethnic Specificity

	Number of Teams	Percent
Non-Hispanic:		
Black	4	7.7
White	13	25.0
Hispanic:	2	3.8
Asian/Pacific Islander:	0	0.0
Diverse:		
Black, White, Hispanic, Asian & Others	33	63.5

As the two tables show, teams of females and teams of White students are equally likely to occur. However, comparing gender-specific with race and/or ethnic-specific data, shows that 46.2 percent of the female teams (6) were White and 7.7 percent (1) was Black. Overall, 13.5 percent of the teams were female as well as race and/or ethnic specific. For the male teams, 13.3 percent (2) of the male teams were White and 13.3 percent (2) of the male teams were Hispanic. This shows that only 7.7 percent of the teams were male as well as race and/or ethnic specific. Thus, almost 79 percent of the time, the SBI teams have been diverse according to gender, race and ethnicity. Clearly, student diversity has contributed to and not detracted from the success of the SBI program at the University of Houston-Downtown.

Structuring the SBI Project for Student Diversity

With the goal of focusing on quality instruction for all students, regardless of gender, race, or ethnicity, the SBI faculty have approached all SBI teams with the same degree of concern. Emphasis has been placed on organizing, monitoring, and controlling the project, rather than on adjusting the project requirements to fit theoretically different needs of diversely constructed teams. A handout has been prepared for each team that outlines the final report structure.

Consulting Guidelines also provide the teams with the exact location of sample pages in the Student Consultant's Manual. In addition, information is provided on grading of the project and the sequencing of reports.

Three reports are submitted throughout the semester. The first report contains information on the company's background and objectives. This report is edited by the POM professor and returned to the students with suggestions for modeling techniques to apply to each problem/opportunity area in order to evaluate the company's potential for achieving their stated objectives. The second report contains an edited first report and the application of any models the students believe to be appropriate whether suggested by the professor or brainstormed from team meetings. Again, the professor edits the report and determines the completeness of the modeling efforts. The third report contains the revised second report and the conclusions and recommendations developed from analyses of the modeling applications. This report is graded for grammar and spelling, organization, analyses of applicable POM models, and conclusions and recommendations. After a final edit, the report is submitted to the professor, the company, and the SBI.

While to some it may seem that this amount of monitoring and controlling is excessive, it is the opinion of all the production/operations management faculty that it is essential to ensuring a final, quality report. Since the University of Houston-Downtown is an undergraduate institution, learning the process for carrying out this type of project is as important as the final product. It is the faculty's opinion that this degree of monitoring and controlling is necessary to ensure a quality product from any undergraduate student, regardless of gender, race or ethnicity.

CLIENT DIVERSITY ISSUES

To support the UH-D SBI approach of not artificially creating diverse teams or restructuring the SBI program based on the gender, race and/or ethnic background of students, we next studied the relationship between recruiting a diverse client base and the diversity of the team members. Given the fact that student teams identify the business client to be contacted by the SBI faculty, and that these student teams are usually diversely composed, we investigated whether the UH-D program had a significant pattern of consulting by gender, race, and ethnicity.

According to the ownership figures compiled for the same fifty-two cases for which data were available, gender specificity is as follows:

Table 3
Business Ownership by Gender Specificity

	Number of Teams	Percent
Male	30	57.7
Female	12	23.1
Male/Female	10	19.2

These figures reveal no real surprises. As expected, the majority of the companies are male owned. However, it should be noted that through our SBI program a significant number of female ownerships and female partnerships have received consulting. By race and ethnicity, the ownership figures for the fifty-two cases show the following:

Table 4
Business Ownership by Race & Ethnic Specificity

	Number of Teams	Percent
Non-Hispanic:		
Black	4	7.7
White	33	63.5
Hispanic:	2	17.3
Asian/Pacific Islander:	0	9.6
American Indian"		1.9

Again, as expected, the majority of the companies are owned by White, Non-Hispanic persons. In general, however, these statistics are representative of the small business ownership data for the SBI district in which our program operates with 18 percent of the businesses are Hispanic owned, 10 percent are Asian owned, 15 percent are Black, Non-Hispanic owned and 57 percent are White Non-Hispanic owned. It appears that the UH-D SBI program is adequately recruiting to all but Black, Non-Hispanic small business persons. In this regard, it is interesting to note that our SBI students are over twice as likely to consult to Hispanic owned businesses as to Black, Non-Hispanic owned businesses, even though the College's student percentages of these populations are approximately equal.

Recruiting Based on Client Diversity

Having identified that diversity is present in the client base, the group membership was analyzed in relation to the clients served to determine if students were more likely to select a company with which to work based on their own gender, race and/or ethnic background. From our sample of fifty-two cases, nineteen companies were owned by Asian, Hispanic, Black Non-Hispanic, or American Indian persons. It was observed that 47.4 percent (9) of these minority businesses had one or more persons of the same race or ethnicity on the student team. When all team members were Black or Hispanic, the company selected was usually under the same racial or ethnic ownership. Indeed, the two teams of Hispanic males both chose companies owned by Hispanic males. White students were team members on 68.4 percent (13) of the minority owned business consulting cases. If a goal of the SBI program is to increase service to minority businesses, this data may suggest that professors should not discourage minority racially or ethnically specific teams since these teams may be more likely to provide consulting to minority businesses. This may be particularly relevant to allowing teams of Black, Non-Hispanic students to recruit Black small business owners, thereby increasing the percentage of Black ownerships to which consulting is provided. Still, according to our experience, having one team member of a specific race or ethnicity increased the likelihood of consulting to a business owned by a person of the same race or ethnicity. This appears to suggest that there is an obvious benefit to racially and ethnically diverse teams.

The sample of nineteen minority owned businesses included 42.1 percent (8) female ownerships and/or partnerships. Yet only two of the four female teams chose companies owned by minority females. With respect to the twenty-two gender specific teams, female teams chose female ownerships and partnerships 27.3 percent of the time (6 companies) and male teams chose female ownerships and partnerships 31.8 percent of the time (7 companies). Interestingly, male teams were almost equally likely to choose female ownerships/partnerships as male ownerships/partnerships. In addition, teams of males and females were more likely to consult to female businesspersons than a gender specific team (40.9%; 9 companies). Therefore, gender specific and non-gender specific teams should be acceptable to the SBI professor, although gender diversity does appear to be more likely to offer student consulting to female ownerships and partnerships. Ironically, diverse teams were twice as likely as female teams or male teams to offer consulting to female owned businesses.

CONCLUSIONS

In general, the results tend to show that gender and race/ethnic diversity of student teams increases the likelihood of client diversity. However, there appears to be some benefit to race/ethnic specific teams with respect to recruiting Hispanic or Black businesses. In contrast, female specificity does not increase the likelihood of recruiting female ownerships and partnerships. Diversity with respect to gender appears to be optimal.

From this two year experience, it is the conclusion of the SBI faculty at the University of Houston-Downtown that the SBI professor should be aware of these benefits of diverse gender, race, and ethnic teams, but should not construct teams to conform to some preconceived notion. We've had a team of three females (Hispanic and White) consult effectively with a Black male small business owner. We've had a team of three males (White and Black) consult effectively with an Hispanic female small business owner. Successes such as these support the opinion that the professor should operate the SBI program within the natural constructs of his/her environment and focus on the quality of the project as an instructional goal removed from restrictions imposed by diversity considerations.

We, at the University of Houston-Downtown, have structured a program that builds on the abilities of our undergraduate students, emphasizing their intellectual challenge and commitment to the SBI project as a unifying goal rather than identifying differences among team members. We have provided consulting to a racially and ethnically diverse small business client without excessive manipulation of student team composition. We have met the needs of both male and female small business owners and partners, again without excessive manipulation of student teams. Our student teams have been challenged through an organized, monitored, and controlled report structuring and formatting process appropriate for any group of undergraduates.

We have, however, made one modification to our follow-up activities of the client management process. In Spring 1994, we added a Spanish language version to the English language version of the student and project evaluation questionnaire that is sent to the small business client after completion of the project. However, thus far, this concession to diversity has not met our expectations. Clients of all racial/ethnic background who have returned the questionnaire have completed the English language questions. Perhaps this shows that business persons marketing to a diverse clientele in the Houston area prefer not to highlight their diversity. Those of us who orchestrate the SBI program at the University of Houston-Downtown concur with this viewpoint.(1)

(1). The author acknowledges the valuable assistance of Dr. Gail Evans,

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WHAT IS THE VALUE OF AN SBI PROGRAM:

CLIENTS PERCEPTIONS

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ABSTRACT

The Small Business Institute program is under increasing pressure to improve its quality and provide measurable results of its value. Failure to do so may result in the withdrawal of Federal funding.

Recent research on the perceived value of SBI programs to clients is limited. This study determined: (1) the benefits from participating in the program; (2) the impact the project had on the business; (3) the willingness to pay for a project; and (4) suggestions for improving the SBI program.

SBI clients for 1990-93 were surveyed at the University of St. Thomas. A total of 102 respondents replied to a mail survey and were analyzed. While most clients see the benefits of the SBI project, few see measurable impacts on their business. Only a modest percentage are willing to pay for a consulting team.

The major implication of this study is that program objectives need to be clarified, projects need to be more clearly defined and greater emphasis placed on recommendations that can be measured. It is also suggested the SBIDA should consider a nationwide program to periodically survey clients and report to the Administration and Congress on the value and results of the program.

INTRODUCTION

The Small Business Institute program is under increasing pressure. In the past, SBI has operated freely under the Statement Of Work provided by the Small Business Administration. While this has provided guidelines, SBA has seldom critically reviewed programs or SBI projects. This has changed of late. The rise of TOM increased awareness of, and the importance of quality. The recently created position of vice President for Quality Assurance by SBIDA was done in response to improving overall quality of SBI programs individually and collectively.

The second pressure is funding from the Federal government. Earlier this year, SBA decided not to fund the SBI program for fiscal year 1995. Subsequent advocacy efforts have reversed this decision by the Administration and funding was restored by Congress. In any event, the 500 institutions that are part of the SBI program need to be able to demonstrate that the SBI program is valuable to small businesses and the nation.

PREVIOUS RESEARCH

There is a dearth of recent research on the value of the SBI program to clients. More research has been published on the value of the SBI program to students. Most research has focused on substantive issues or decision making among small businesses.

The research that has been conducted seems to fall into two categories. The first into evaluating an SBI program from the entrepreneur's perspective (Southern & Schwartz, 1991; Weinstein, Nicholls & Seaton, 1992). The second into evaluating an SBI program in terms of the perceived value of the program to clients or measuring the results from the SBI consulting project (Borstadt & Byron, 1993; Fontenot, Franklyn & Hoffman, 1994; Stephenson, Konarski & Phillips, 1991). This research clearly falls into this latter category.

OBJECTIVES

The objectives of the study were to determine: (1) the benefits of the SBI program to clients; (2) the impact of the SBI consulting team on clients; (3) how much SBI clients would pay to have a consulting team; and (4) what improvements could be made.

RESEARCH DESIGN

SBI clients at the University of St. Thomas for the three academic years of 1990-1993 were surveyed during the summer of 1994. This time frame was selected to allow enough time for clients to implement the SBI consulting teams recommendations and gauge the impact on their business.

Former SBI clients were surveyed by mail in the following areas:

*Benefits from participating in the program:

-Prioritization of benefits
-Usefulness of the program
-Impact of recommendations
-Satisfaction with the project
-Likelihood of recommending the program

*Impact the SBI program had on the business:

Sales
-Costs
-Profit
-Number of employees
-Product quality

-Increased awareness

*Willingness to pay for having an SBI project done.

* Suggestions for improving the SBI program.

The survey was mailed to 256 former SBI clients. second mailing was made to non-respondents. Of that number, 55 were returned as undeliverable and 102 were complete and usable. This was a very respectable response rate of 50.7 percent after undeliverable surveys were excluded. The significant number of undeliverables may be largely attributed to businesses that are no longer in operation or have moved. The data was then analyzed using the CRUNCH statistical package.

Some of the characteristics of the respondents and firms were: 56.8 percent were males; 72.9 percent were college educated; 7 years was the median years in business; 90.6 percent were for profit organizations; 49.5 percent were service organizations; 4 was the median number of employees; and $225,000 was the median sales. All data is for 1993.

SURVEY FINDINGS

Benefits of SBI Program

Defining the business (22 percent) was seen as the most important benefit from participating in an SBI program. Next in importance was implementation (15.3 percent) followed by having a business plan (14 percent), confirming ideas about what they thought (9.3 percent), obtaining survey information (7.3 percent) and defining the target market (7.3 percent). The remaining 24.8 percent of the benefits identified were widely scattered.

Over 86 percent of the clients found the project either useful (42.7 percent) or somewhat useful (43.8 percent). The remaining 13.5 percent found the project either not useful (7.3 percent) or not very useful (6.2 percent).

The majority of clients (58.9 percent) felt the SBI project had either an extremely positive impact (5.2 percent) or a positive impact (53.7 percent). Another 27.4 percent felt it had no impact. Only 1.1. percent felt it had a negative impact on their business. Another 12.7 percent of the firms had not implemented the recommendations.

Most clients (87.4 percent) were satisfied with the project done for their business. Forty percent were very satisfied and 47.4 percent were somewhat satisfied; 7.3 percent were very dissatisfied, while 5.3 percent were not satisfied.

Probably the best measure of the benefits, usefulness, impact and satisfaction of the SBI program is whether or not clients would recommend the SBI services to others.

An overwhelming majority of 82.8 percent would. Even more importantly, 54.6 percent would definitely recommend it. Another 12.1 percent were undecided with only 5.1 percent that would probably or definitely not recommend it.

Impact Of SBI Project On Business

A modest 28.7 percent of the businesses thought the SBI project helped increase their sales. Most (69 percent) thought it had no effect. Only 2.3 percent thought it had decreased sales.

Only 10.2 percent of the businesses thought the project helped decreased costs; 12.5 percent said the project led to an increase in costs. The majority (77.3 percent) thought the project had no effect on costs.

A modest 23.3 percent of the firms thought the project had increased profits. Only 2.3 percent thought profits had decreased as a result of the project. Again, most of the firms thought it had no effect on profits.

When asked about the impact on the number of employees, 88.2 percent said it had no effect, 10.6 percent said it led to an increase in employees, and 1.2 percent said it led to a decrease.

Most (77.9 percent) firms believe the SBI project had no effect on their firm's product quality. A modest 20.9 percent thought the project helped increase product quality. Only 1.2 percent felt if decreased product quality.

The major impact of SBI projects was on the firm's awareness. Two-thirds of the firms thought that the project had helped increase awareness. Another 32.2 percent said it had no effect. Only 1.1 percent said if had decreased awareness.

Amount SBI Clients Will Pay

Another way to measure the value of the program is to ask whether SBI clients would be willing to pay for having an SBI project done for their business. The results to this question were mixed:

6.4% Are definitely willing
19.2% Are probably willing
41.4% Are unsure
18.1 % Are probably not willing
14.9% Are definitely not willing

The amount clients are willing to pay varied from nothing to $2,000. The median amount was $200 and the mean amount was $304. The following profiles the amount businesses are willing to pay:

18.9 % Less than $ 100
24.3% $100-$199
18.9% $200-$299
10.8% $300-$399

5.4% $400-$499
21.7% $500 or more

Improvements That Could Be Made

Client recommendations to improve the program were few and very diffused. 56.9 percent of the clients made at least one recommendation while 25.5 percent made two and 7.8 percent made three. recommendations were:

10.7% More instructor involvement
8.7% More student knowledge
8.7% More communication
8.7% More focused project
5.4% Quicker response

IMPLICATIONS

SBI clients are generally satisfied with the SBI program and would recommend it to other businesses. This provides a solid foundation of support for the program.

The greatest impact of the project was increasing awareness of the firm. Unfortunately, clients see little or modest impact in increasing sales, profits, and employees, decreasing costs or improving product quality. This may be why only one in four is willing to pay for having an SBI project, and those clients that are willing to pay would only pay about $300.

What does this mean for an SBI program? It probably means that program objectives need to be clarified, projects more clearly defined, and greater emphasis placed on recommendations that can be measured. Doing so will improve the quality of SBI programs, support continued Federal funding, and provide a safety net should Federal funding be reduced or eliminated.

It is the hope of this SBI director that SBIDA will consider developing a nationwide program to periodically survey SBI clients and report the results to SBIDA, the Administration and Congress. The focus of such a program should center on the value of the program to clients and measurable results such as increasing sales, decreasing expenses, increasing the number of employees, etc.

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WHAT IS THE VALUE OF AN SBI PROGRAM:

STUDENTS PERCEPTIONS

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ABSTRACT

Students, along with clients and instructors, are the core components of an SBI program. Published research from a student's perspective has been diffused with relatively little work done on their experience during, and the usefulness after. This study addresses these issues.

SBI students for three academic years from the University of St. Thomas were surveyed by mail on their likes and dislikes of their SBI experience, the usefulness of the experience and suggestions for improving the experience. Over three hundred students responded.

Students overwhelmingly liked their SBI experience, especially the real world hands-on part of it. The amount of time the project required was the thing they liked least. Most were positive about their classroom preparation, client cooperation, instructors, final report and final presentation. Teamwork received mixed ratings.

Most students thought their SBI project helped them get a job and used what they learned on the job. They also think it should be required and would take it again even if it was not required. Better clients was cited as the most important way their SBI experience could have been improved.

This research indicates a solid foundation for this SBI program, but identifies areas for improvement: better clients, clearer expectations, improved communications and improved teamwork. Research-wise, there is much to do and many avenues to pursue. The usefulness of SBI for students seems to offer a particularly fruitful path to explore.

INTRODUCTION

The core of any SBI program revolves around its students, clients and instructors. Small Business Institute directors are particularly interested in students since teaching is their primary responsibility.

Much of the previous research on SBI students has dealt with either entrepreneurship (Hatten & Ruhland, 1994; Robinson, Huefner & Hunt, 1994), the state of the SBI program (Brannen, Hutchens& Begley, 1994), or specific aspects of SBI related to students (Fontenot, Franklyn & Hoffman,1994; Watts & Jackson, 1994). There appears to be a lack of recently published research on whatstudents experienced when they did their SBI project and how useful it has proven afterward. This study addresses these issues.

OBJECTIVES

The objectives of this study were to: (1) determine what students liked most and least about their SBI experience; (2) rate specific aspects of their experience; (3) determine the usefulness of certain aspects of their experience; and (4) determine what could be changed to improve the experience.

RESEARCH DESIGN

University of St. Thomas SBI students for the three academic years of 1990-93 were surveyed during the summer of 1994. This time frame was selected to allow enough time for students to utilize what they learned during their SBI experience and reflect on specific aspects of that experience.

Former SBI students were surveyed by mail in the following areas:

* Likes and dislikes of the experience.
* Evaluation of specific aspects of the experience.
*Previous course preparation
  -SBI class preparation
  -Client choice
  -Client cooperation
  -Instructor helpfulness
  -Time required
  -Teamwork
  -Report writing
 -Final presentation

*Usefulness of the experience:
 -Should be required
 -Value of the experience
 -Getting a job
 -On the job
 -Take if not required

* Suggestions for improving the SBI experience.

The survey was mailed to 731 former SBI students. A second mailing was made to non-respondents. Of that number, 32 were returned as undeliverable and

309 were complete and usable. This is a respectable response rate of 44.2 percent after undeliverable surveys are excluded. The data was then analyzed using the CRUNCH statistical package.

Some of the characteristics of the respondents were: 72.5 percent took the Marketing Management class; 55.1 percent were female, and 25 was the median age.

SURVEY FINDINGS

Likes and Dislikes of the Experience

Students liked the real world hands-on experience the most. In fact, 36.3 percent said it was the thing they liked most. The following is the rank order mentions of the first and second things students liked about their SBI experience.

23.0% Real world hands-on
16.3% Teamwork
9.2% Applications orientation
9.0% Working with clients
5.9% Making final presentation
5.2% Helping a real business

This accounted for 68.6 percent of the total mentions. The remaining mentions were very fragmented.

The amount of time the SBI project took was the thing students liked least. This was followed closely by teamwork. They accounted for 22.9 percent and 17.9 percent respectively of the first mentions. The following is the rank order first and second mentions students liked least about their SBI experience.

20.5% Amount of time
16.5% Teamwork
10.0% Client
5.2% Coordinating schedules

This accounted for 52.2 percent of the total mentions. The remaining mentions were very fragmented. Some examples were the final draft, instructor, useless class work, lack of focus, lack of client communication, etc.

Evaluation of the Experience

Most students (73.3 percent) thought that previous courses prepared them for taking the SBI project. Only 8.0 percent thought they were not prepared with 18.7 percent neutral. When asked about SBI classroom preparation for the project, 74.7 percent thought the class prepared them well. Only 10.6 percent felt they were not prepared and 14.7 percent were neutral.

Students response to client choice was more mixed. While 63.8 percent were either positive or very positive; 13.8 percent were negative. The remaining 22.4 percent were neutral.

One bright spot was client cooperation. Almost 47.1 percent viewed it very positively and another 27.3 percent somewhat positively. Only 7.8 percent viewed client cooperation negatively and 17.8 percent as neutral.

Another bright spot was instructors. Over half (51.0 percent) viewed their SBI instructor very positively. What's more, 30.7 percent viewed their instructor somewhat positively for a total of 81.7 percent. The remaining students viewed their instructor as either neutral (11.7 percent) or negatively (6.6 percent).

The amount of time the project took was the factor students liked least about their SBI experience, yet 62.7 percent viewed it positively. However, 16.1 percent viewed the amount of time negatively. The remaining 21.2 percent were neutral.

Teamwork was a factor students liked most and least about their SBI experience. Here again, students viewed their experience either very positively (37.5 percent) or somewhat positively (32.8 percent). Unfortunately, a moderately high 16.4 percent viewed teamwork negatively. The rest viewed teamwork as neutral (13.3 percent). It seems that teams either 'click' or they don't.

Students viewed writing the final report positively. While most (50.2 percent) viewed the experience somewhat positively, another 25.1 percent said it was very positive. A relatively small (6.4 percent) viewed it negatively, with only 1.0 percent saying it was a very negative experience. The remaining 18.3 percent were neutral.

The final presentation was viewed positively by 82.5 percent of the students. None viewed it very negatively and only 4.1 percent somewhat negatively. The rest said it was neutral for them. Obviously completion of the SBI project is extremely good for most students and helps them carry away good feelings about their experience.

Usefulness of the SBI Experience

Students think SBI should be required. In fact, 67.9 percent say it should definitely be required while another 20.5 percent say it should probably be required. On the negative side, only 1.7 percent and 4.1 percent say it should definitely or probably not be required. A small 5.8 percent are not sure.

Students rate the value of the SBI experience very highly. Some 75.0 percent said it was definitely a valuable experience and 19.2 percent viewed it as probably a valuable experience. Thus 94.2 percent said it was a valuable experience. Only 2.4 percent said it was not a valuable experience with 3.4 percent unsure.

The link between getting a job and the SBI experience is less clear. Still almost half (49.3 percent) of the students thought it either probably or definitely helped. Another 27.0 percent were not sure, with 23.7 percent thinking it probably or definitely did not help them get a job.

The SBI experience definitely helps former students on the job. Most (70.1 percent) say the experience either probably or definitely helps them on the job. Of the remaining, 1 6.2 percent are not sure and 1 3.7 percent do not think it has been useful.

Most (76.4 percent) students would take an SBI course even if it was not required. In fact, 43.3 percent said they would definitely take an SBI course. Only 10.9 percent said they either probably or definitely not take it. The remaining 12.7 percent were unsure.

Suggestions for Improving the SBI Experience

Better clients (23.4 percent) was cited as the most important way their SBI experience could have been changed to improve their SBI experience. On an overall basis of most, second and third most important mentions, here is the rank order listings of what students suggest for improving their experience.

19.9% Better clients
10.4% More project time
6.6% Client follow-up
6.0% More instructor guidance
5.8% More class preparation

These five responses accounted for 48.7 percent of all mentions. The rest were widely scattered. Some of the others were better grading, team selection, more structured, more client time, relating course to SBI, etc. Clearly, the success of the SBI experience is directly related to the client.

IMPLICATIONS

SBI students of the program surveyed are very satisfied with the SBI course they took. They particularly liked the real world hands-on application orientation of the class and teamwork. The amount of time required and teamwork were the things they liked least. Teamwork appears to be one of those elements that brings out the best and worst of feelings. In a similar vein, the consulting team-client relationship is also a very sensitive one. It seems that the highest highs and lowest lows are most closely related to personal relations rather than the tasks to be undertaken.

Students overwhelmingly see their SBI experience very positively. They found the experience valuable, felt it helped get a job, and definitely helps on the job. Even more importantly, they think the class should be required and would take it again even if it was not required. Better clients and more project time were the most important suggestions for improvement.

What does this mean for this SBI program? The most important place to start is good solid, committed clients. Clear expectations of what is required of students and clients is important. A strong task orientation by the SBI team is also critical. This relates to the amount of effort, flexibility and communication among team members and the client. In the end the success or failure of a project seems to be largely determined by client commitment, communication and teamwork.

The role of the SBI instructor is to identify, specify and communicate these critical factors to students and clients when the course begins. Periodic reminding is also helpful. The value of a successful project for the individual, team and client should also be emphasized. While a significant amount of research has been conducted on various aspects of SBI students, much is left to be done. Some issues that appear fruitful are clear specifications of the value and usefulness of the SBI program, issues of teamwork, and comparisons among different SBI courses and programs.

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BEYOND CLIENT SATISFACTION: SBI'S EDUCATIONAL IMPACT

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ABSTRACT

During the past two decades numerous evaluations have examined the client impact of the Small Business Institute (SBI). However, the other side of the equation, educational impact, has seldom been studied. This paper evaluates the educational value of SBI to the students, both immediate and long lasting. It assesses an inventory of student skills and a variety of career impacts, and a perception of entrepreneurial activity by former SBI students.

INTRODUCTION

The Small Business Institute (SBI) provides a mutually beneficial opportunity. For small business owners it provides a free consulting service which they could otherwise not afford; for the university students it provides a learning experience which can not be replicated in the classroom. The U. S. Small Business Administration's (SBA) mission is to assist and develop small businesses. In order to justify grant funding, the SBA encouraged SBIs to evaluate client's satisfaction. It's little wonder that for the past 20 years research has sought to measure client results, job creation, and business startups. (Jackson, Vozikis, Babakus, 1992; Kiesner, 1987; Nafziger & Daniels, 1986;Tallent & Schneider, 1980; Weaver & Soloman, 1985; Weinstein, Nicholls, & Seaton, 1992) It is the educational side of the equation that has often been ignored. Not in terms of students, because student success stories are too numerous to cite. But in terms of evaluations, little has been written regarding the impact on students' skills, careers, and entrepreneurial activities. SBI client and student effectiveness was measured as early as 1981. Buck's study implied student effectiveness via client satisfaction (Buck, 1981). Although she creates a logical conclusion, individual skills remained unidentified. If the real objective for SBI is learning, how to learn and problem solving skills (Ames, 1990), then evaluation should not be neglected.

Weaver's project from 1981-1984 provided the paradigm (Weaver & Soloman, 1985) for subsequent evaluations which typically measured client satisfaction and economic impacts. The most important measure of results for client satisfaction was implementation of recommendations; the most reliable economic impact documented was increased sales. A call-to-arms was then issued to collect data about job creation and economic viability.

Anderson and Elbert explored two educational aspects of SBI. In 1980-81 they surveyed four undergraduate classes, two SBI and two non-SBI (Anderson & Elbert, 1982). Students entered the SBI course with favorable attitudes toward small business and exited with same. In 1986, they reported results from 25 SBI team leaders over a two-year period (Elbert& Anderson, 1986). Unsurprising, team leaders rated improved leadership/organization highest (96%), followed by real world/non-text experience (88%). No other skill, including team work, communication and self-confidence, improved as much as 33% as assessed by these team leaders (Elbert& Anderson, 1986).

Nafziger and Daniels measured perceived value of the SBI to 42 students over a two year period (Nafziger & Daniels, 1980), using a combination of new questions and some borrowed from Weaver. Most (78.6%) students would recommend the program, and the majority (54.8%) agreed or strongly agreed that they acquired practical management skills. All 23 of the students who reported increased management skill felt that the SBI program was valuable to them. The flip side, however, revealed that 5 of 9 who did not acquire management skills felt that SBI was not of value (Nafziger & Daniels, 1986).

In 1990 the University of Northern Colorado reported an exploratory investigation of SBI effectiveness perceived by marketing and management majors (Fontenot,Viswanathan, & Hoffman, 1990). They surveyed 127 who participated over a 14-year period regarding analytical skills, interpersonal skills, operational skills, and career usefulness. The data suggested that both marketing and management majors agreed that there was skill enhancement. Furthermore, both groups had similar attitudes overall toward the SBI experience with regard to analytical, interpersonal, and career usefulness skills. The only significant divergence arose with operational skills. Management majors more strongly agreed that they had acquired these skills than their marketing counterparts (Fontenot, Viswanathan, & Hoffman, 1990).

Dietert surveyed 74 of 340 former SBI students who participated between 1986 and 1992 (Dietert, Halatin, & Scow, 1994). Students found SBI to be of high value (1.0 = no value; 5.0 = great value), and virtually all would recommend SBI to a student (4.6) or a business owner (4.5). As viewed from their present day perspective, the overall value of SBI was rated 4.0 on the same 5.0 point scale. A list of reasons for perceived value preceded the "overall" ratings. Skills ranked highest with "learning to work with a team" (4.3) and "developing good work habits" (3.7) ranking first and third respectively (Dietert, Halatin, & Scow, 1994).

This following study draws from the explorations of its predecessors. However, it includes a lengthened time period and it also investigates multiple aspects of the SBI educational experience using the same group of respondents. Also, it examines specific skill, career and entrepreneurship impacts perceived by SBI student participants.

METHODOLOGY

List Development

SBI was as a field study until 1987 when it became a course. As a result a list of all SBI participants was developed using registrar's records, class lists, and copies of past SBI reports. In total, 223 individuals were identified as having participated in SBI between academic years 1976-77 and 1992-93; all were contacted.

Questionnaire Development

The three-part questionnaire assessed the student skills, career impacts, and the potential entrepreneurial impact of the SBI program. Three sources were used to develop the skills list in the experiential impact section of the survey- verbal input from members of our Business Administration Advisory Council (practitioners); handouts from presentations and workshops at SBI regional and national conferences; and, lists compiled jointly with the Director of Career Development and Placement (CD&P). CD&P also contributed to the first-job impact questions.

The questionnaire was first tested using 1993-94 SBI participants (parts one and two) and a sample of pre-1993-94 SBI participants served as an overall test of the instrument. No major changes were made to the instrument following either test and the pre- 1993-94 test cases were included in the final sample.

Questionnaire Distribution and Response

The four-page instrument was mailed via first-class mail to the entire database of 223 SBI participants on February 14, 1994, along with a, cover letter and postage paid envelope. Each return envelope was coded so that the returned instrument could be matched to the original SBI participant. A second mailing of a different colored instrument plus unique cover letter and postage-paid return envelope was mailed to those not responding to the first mailing on March 21, 1994. One-hundred thirteen usable instruments were returned by May 29, 1994, and entered into an SPSSx subprogram; this resulted in a 50.6% response rate, a rate compatible with industry standards for double mailing.

Sample Profile

The sample was almost equally split between men (47.8%) and women (52.2%), and was also representative of SBI participants during the period (1976-77 to 1992-93). Ninetyeight (98.2%) percent were business majors. Most (91.8%) had worked with only one SBI client, with the remaining 9.2% working on multiple SBI projects. Slightly less than one-third (30.8%) have earned another degree since graduation, with another 15.2% presently pursuing a graduate or professional degree.

LIMITATIONS

Non-response

Every mail study has potential error due to non-response. In this case, 49.4% of the targeted respondents chose not to respond. The authors feel that lowered than desired response is due to lack of interest in answering the survey or inability to recall the desired information. This limitation may tend to inflate positive interpretations, but positive interpretations appear consistent with the positive course evaluations throughout the SBI's tenure Wittenberg.

Memory Decay and Recall

Some of the targeted respondents had participated in SBI as many as eighteen years ago, so there was naturally concern about their ability to recall their SBI experience. Previous anecdotal experience indicated that experiential programs were long remembered in detail. To test this hypothesis with SBI, respondents were asked 9 they could recall their client business. Fully 86.7% could remember the name of their client business or its type and location. Of the 13.3% who could not recall the client business, one-third graduated before 1980 and less than half before 1985. If respondents could not name their client, they were questioned about the details of the experience. On@ five (4.4%) failed to reveal sufficient detail about their clients,yet they all had vivid memories about the experience. Therefore, recall posed little problem for the overwhelming majority of those who responded, but the inability to recall may have been a factor in non-response of the targeted sample units.

Figure I: Skills Enhanced or Expanded

	Percent Responding	Agree	Strongly Agree
Teamwork	98.2	50	50
Problem Solving	98.2	40	60
Communication	94.6	30	70
Personal Contribution	91.0	35	65
Organization	93.8	30	70
Time Management	84.7	20	80

Computer Software Lab	38.5	30	70

FINDINGS

Skills Impact

The first part of the questionnaire assessed the SBI program's impact on seven skills. These skills were further separated into two subsets: critical skills (teamwork, communication, and problem solving) and corollary skills (organization, time management, perception of personal contribution and computer software usage). Figure 1: Skills Enhanced or Expanded shows the percentage of the respondents who "agreed" or "strongly agreed" that each of the seven skill was enhanced or expanded.

In terms of number of skills enhanced or expanded, 77.8% agreed (either "strongly agreed"or"agreed") that six or seven of the skills were enhanced or expanded, with the most frequently responded number being six skills. Almost one-third (31.1%) agreed (either strongly agreed or agreed) that all seven skills were enhanced or expanded. Figure 2: Number of Skills Strongly Enhanced Among Those Experiencing Enhancement indicates the percentage "strongly agreeing" that a multiple number of the skills were enhanced.

Of the 14.4% who did not "strongly agree" that any of the seven skills were enhanced or expanded, all (100%) fell into the "agree" group on at least three of the seven skills. One explanation may be that students perceived themselves to have high skill levels prior to SBI, rather than that little or no enhancement occurred. Since no criteria for skill enhancement were defined, the line between strongly agree and agree may have been inconsistent between respondents.

Critical Skills: Teamwork, Communication, and Problem Solving

Three of the skills are considered critical in that that enhancement is a fundamental goal of the SBI program: teamwork, communication, and problem-solving skills. Table I, Critical Skills Enhancement indicates the SBI program is doing well. More than two-thirds (70.8%) of the participants indicated enhanced or expanded skills in one or more of the pre-defined critical skills. If one accepts that there may be a fine line dividing "strongly agree" and "agree" responses, then the desired result has been achieved with 91.2% of respondents.

Gender analysis shows no statistically significant variations. In terms of graduation year, graduates since 1982 were more likely to "strongly agree" that these communication skills were enhanced or expanded (42.3% post- 1982 to 25% pre1982 strongly agree, X(2) significance .09). The SBI program took a more skill-based approach in that year with director change, which may explain the shift in perceived enhancement.

Corollary Skills: Organization, Time Management and Personal Perception of Contribution

Figure 2: Number of Skills Strongly Enhanced Among Those Experiencing Enhancement

One	25.6%
Two	32.6%
Three	16.3%
Four	11.6%
Five	9.3%
Six	3.5%
Seven	1.1%

Table 1: Critical Skills Enhancement

Skill Enhancement Level	Questionnaire Translation	Percentage Responding
Superior	"strongly agreed" that all three skills were enhanced	15.9%
Excellent	"strongly agreed that two skills were enhanced, "agreed" that third skill was enhanced	20.4%
Good	"strongly agreed that one skill was enhanced,"agreed" that other two skills were enhanced	34.5%
Fair	"agreed" that all three skills were enhanced	20.4%
Unaffected	no "strongly agree" or "agree" responses	8.8%

The SBI program does not specifically attempt to bring techniques to the participants attention to enhance the corollary skills. Thus any increase in enhancement of these skills would be a by-product of the SBI program. That 84.7% and 93.8% of respondents experienced enhancement of time management and organization skills, respective, indicates a strong by-product of the SBI program. An analysis of patterns by gender showed no significant differences between male and female respondents. In terms of graduation year, graduates since 1982 were more like to "strongly agree" that organization skills were enhanced or expanded (38.9% post-1982 to 20% pre- 1982 strongly agree, X(2) significance .06).

One motivation for participation in experiential learning is improved self-confidence. Personal perception of respondent's ability to contribute to an organization is also positively impacted by SBI for 91.8% of the respondents. At a significance level of .05, women were more likely to strongly agree that the SBI program had enhanced their perception of their ability to contribute to an organization than were men. However, they were also more likely to disagree. This may be because women students are split into two groups: those with supreme self-confidence and those with limited self-confidence. For the men, the program seems more to reinforce their self-perception of worth rather than to significantly boost it. The findings do indicate that case supervisors need to be more aware of female student's entry level contribution perceptions as development of the program progresses.

Mandatory use of computer software is a recent phenomenon. Although students frequently used word-processing software during the late 1980s, spreadsheet (Lotus 1-2-3, Excel), presentation (PowerPoint, Harvard Graphics), and page design (PageMaker) software were well supported only since 1990. As hoped, a marked difference in enhancement of computer skills occurred starting with those participating after 1990. Post-1990 graduates were twice as likely (69.6% to 30. 1 %) to agree (both "strongly agree" and "agree") that participation in the SBI program enhanced or expanded their computer software usage. As computer capabilities increase, more software will be introduced to strengthen skills in this area.

Career Impact

Another clear signal of the SBI prograrn's worth to the participants was their use of their SBI experience in their job search process. Two aspects of the job search were of interest: whether they noted SBI participation on their first-job resume and whether they cited SBI participation within the interview process. Figure 3, Use of SBI Participation on First Job Resume and in Interview clearly shows the value that the respondent placed on the perceived value of the SBI experience to perspective employers.

Figure 3: Use of SBI Participation on First job Resume and in Interview

Used in Job Interview	1990-93	96.7
	1992-89	90.7
	Before 1982	71.4

Used on Resume	1990-1993	90.3
	1962-1989	86.0
	Before 1982	62.9

The rise in post- 1981 use is attributed to the change in emphasis on critical skills. The rise in use post-1991 could also be influenced by the tightening job market and the perception by the students that anything that seems even remotely like work experience should be on the resume. Regardless, it seems clear that the SBI has always had value in the eyes of the student and as the program matures this value get stronger (Job interview, X(2) =9.859, p=.01; resume, X(2)=9.40881, p=.01).

Career Direction

One of the most valuable purposes of any experiential program is the opportunity it affords students to test their Figure 4: Respondents' First Employment Impact

Received higher starting salary	7.3
Given more responsibilites	12.6
Earned first promotion more quickly	21.8
Employer cited as hiring motivation	22.7
Accelerated training	23.4
Given responsibilites sooner	26.1

attraction to different career fields. Certainly SBI allows the student to judge whether consulting would be an attractive field. However, most traditional undergraduates are considered ineligible for such positions upon graduation unless they have extensive job experience.

Little career redirection by participants was anticipated because most SBI students were fall term seniors. A large percentage (84. 1 %) remained in their chosen management career path (accounting, finance, human resources, marketing, or operations) unswayed by the SBI experience. These results confirm that SBI serves the purpose of reinforcing the participant's chosen career field rather than redirecting it.Yet for those 15.9% who experienced some motivation to redirect, it is assumed that SBI helped in defining more specifically the career options.

First Employment Impact

The most significant career impact of SBI was that 75.0% of respondents used some of the same skills employed in SBI within their first job. Figure 4. Respondents First Postgraduation Employment Impact shows addition values attributed to the program.

While students might prefer higher starting salaries, the respondents provided an eloquent indication of the value with which employers perceive the SBI program. Especially noteworthy was that more than one of ftve employers cited the student's SBI participation as a reason for extending the first job offer. This in itself is a reason for jubilation and certainly a factor that could be cited in encouraging students to participate.

Early promotion and accelerated training pays dividends to both the student and the employer. Less training reduces training costs and the student who is promotable more quickly is more valuable to the firm, as they can assume responsibilities more quickly. For the student, early promotion usually means higher pay, which more than offsets equivalent starting pay. Also, accelerated training usually means more interesting assignments, which provide qualitative benefits for SBI students. Employers have long understood the value of experiential education. This evidence should further reinforce the current interest among colleges to build more such programs into the academic curriculum.

Entrepreneurship Impact

The U. S. Small Business Administration has consistently fostered interest in small business as part of the educational mission of the SBI program. Educators claimed that the SBI program influenced students regarding small business but seldom measured the interest generated.

Business Startups

Although only 14.2% percent of our respondents own businesses, it is revealing compared to the full alumni database. For the same period (graduates between 1977 and 1993) only 2.55% of all graduates own businesses. Even compared to the business graduates (2.63%) for the same period, former SBI participants own businesses more than five times more frequently.

SBI participants tend to own one-unit operations (77.8%), with few employees (73.3% have fewer than 11 employees, with 53.3% having fewer than 5 employees) and modest sales (75% have less than $2 million in sales with 37.5% less than $250,000), in the service (78.6%) and retail (14.3%) arenas. This profile of service start-ups parallels the nationwide trend.

Two-thirds (66.0%) of participants would like to own their own business, with most (66.6%) interested in starting a service business. More than one-third (37.9%) of those who are interested have taken preliminary steps to get their businesses started. Since starting a business is largely a function of knowledge, experience, and wealth accumulation, most of those who have started their own businesses (75.2%) have graduated before 1984.

Interaction with Small Business

Beyond interest in start-ups, the SBI experience seems to generate other associations with small business. While only 25.7% work directly for a small business (75.8% are family businesses), 65.4% work with small businesses as customers or suppliers. As more and more business opportunities emerge within the small business sector, this knowledge of the small business mindset could be one of the more powerful benefits of program participation.

CONCLUSIONS AND RECOMMENDATIONS

SBI students overwhelmingly enhance or expand their skills (both critical and corollary) whenenrolled in the program. More importantly, graduates indicated critical skills such as teamwork, problem solving, and communication were enhanced 95% of the time. Of further interest, more than 90% of respondents experiencing critical skill enhancement noted that multiple skills were affected.

Students recognize the career potential of SBI. For more than a decade they included SBI participation on their resumes and discussed it in their interviews. Employer acceptance provides more encouragement SBI participation generates first-job offers for one of five as reported by the students.

Although the immediate affect remains negligible, strong implication exists that SBI students generate business ownership. They own businesses over five times the rate of the typical graduate and fully two-thirds would like to own their own businesses. Since business ownership is a function of knowledge, experience, and wealth accumulation, SBI graduates stand at the threshold of business formation after 20 years of the program's existence.

Despite the numerous SBI program evaluations, no one has measured the economic impact of the graduates themselves. Any future evaluations of the SBI program should include the entrepreneurial impact of this sophisticated small business constituency.

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PERCEIVED VALUE OF ENTREPRENEURSHIP COURSE CONTENT AND PEDAGOGY

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ABSTRACT

This study reports on the perceived value of course content and pedagogics as assessed by alumni of Boston University Similar to Gartner andVesper's (1994) study of faculty perceptions, we found business planning was most highly rated as a learning experience, but in contrast, our study showed a variety of pedagogics were perceived valuable by students one to five years after graduation. Comparison of responses was made by gender, graduate/ undergraduate level, and across two groups of former students, one graduating before 1988, and the second before 1993. While few differences were found in graduates in the 1988 and 1993 groups, or by graduate/undergraduate level, variation in responses were noted by gender. Both men and women rated business plans, guest speakers and discussion as very effective techniques, but women valued quizzes, written assignments and secondary research more than men. This implies that reliance on a single pedagogy may not adequately serve male and female students, hence instructors should include various pedagogical techniques to provide an effective learning experience for diverse groups of students.

INTRODUCTION

The remarkable growth in programs, courses and techniques for teaching entrepreneurship has resulted in generally acknowledged "standard" aspects to entrepreneurship courses, as well as an increase in "experiments," which have met with varying degrees of success (Gartner & Vesper, 1994). In their comprehensive examination of courses and programs in 177 four year colleges and universities, Gartner and Vesper sought information from faculty about their perceptions of successes and failures in entrepreneurial pedagogical experiments. These authors found no clear indication as to why some experiments succeeded and others failed, calling on other entrepreneurship educators to share their perceptions and experiences.

One explanation may lie in the perceptual differences between what students and faculty believe are valuable in entrepreneurship education. In other words, what an educator may perceive as a "valuable" pedagogy, and course content dimensions, may differ widely from student perceptions. This paper explores perceived value of pedagogy and course content from the student's perspective. Two surveys were conducted in 1988 and 1993 to assess former students perceptions of "value" of entrepreneurship courses at a major east coast university as part of a program assessment for our entrepreneurial center. Comparisons were made by level (graduate/undergraduate) and gender. Results of these studies are compared to findings from the faculty survey reported by Gartner and Vesper faculty (1994). Discussion and implications conclude this paper.

THE STUDY

Many studies have evaluated entrepreneurship education (Robinson & Haynes, 1991; Vesper, 1992; Solomon & Fernald, 1991), some focusing on student populations (Clark, Davis & Harnish,1984; Hornaday, 1982). Few of these surveys have been conducted more than once, limiting the ability of researchers to gauge changes over time. This research is based on a survey that first was conducted in 1988, then again in 1993. The purpose was to evaluate the perceived value of course content and pedagogy in entrepreneurship courses taken by students one to five years after graduation. We sought to examine similarities and differences in perceptions between these groups, by level (graduate, undergraduate) and gender.

Our University offers three undergraduate level entrepreneurship courses and eight at the graduate level. Historically, about forty percent of both graduates and undergraduates take more than one entrepreneurship course. Entrepreneurship course content covers the entrepreneurial process, business planning, entrepreneurial management, corporate entrepreneurship, and entrepreneurial activities in specific areas (i.e. real estate, Eastern Europe, environmental industries). Pedagogy includes cases, guest speakers, group venture opportunity assessment, individual business plan preparation, field studies and in class exercises.

The first study was composed of mail survey of 465 graduate and undergraduate students, for which 161 responded. The second sample was composed of 1009 students, 156 of whom responded to our questionnaire. The total population of students that took at least one entrepreneurship course was 3348. Our overall response rate was 21 percent for the 1474 graduates surveyed. Only former students currently residing in the U.S. were contacted. For the 1993 survey, thirty five respondents were self-employed (20 graduates, 15 undergraduates), similar to 1988 results which found thirty three were selfemployed (20 graduates and 13 undergraduates).

The survey instrument included a mix of open, closed and ranking questions regarding the content and pedagogy in each of the entrepreneurship courses offered. The business plan was included in both the content and pedagogical areas.(1) The questionnaire was modified for the 1993 survey, mostly to reflect changes in courses, and new topic areas such as family business. Descriptive statistics were used to assess the value of entrepreneurship course(s) and t-tests were used to examine differences between the 1988 and 1993 respondents.

For both surveys, the majority of respondents indicated they believed the entrepreneurship course(s) added value to the curriculum by offering unique course content not available elsewhere, and providing information generally useful in business management. (See Table 1.) This exhibit also shows that integration of course concepts was a perceived strength. The effectiveness of the pedagogics remained generally the same from 1988 to 1993, except that the perceived value of video, written assignments and oral presentations declined slightly as effective techniques. (See Table 2.) Business plan preparation was singled out by the majority of respondents as the most effective pedagogical technique used because in the words of a respondent to the 1993 questionnaire, it "ties every individual segment of running/starting a business together."

It was presumed that minor variations in perceived effectiveness would exist between graduate and undergraduates; and this was the case. In the 1993 study, graduate students valued quizzes and library research slightly more than undergraduates (see Table 3). Unexpectedly, in the 1993 survey the biggest differences were by gender. While both men and women rated business plans, guest speakers and class discussion as most effective techniques, women rated quizzes, readings, library and written assignments as significantly more effective techniques than men (see Table 3). Multiple analyses of variance showed these four items were significantly different for males/females at less than $p < .05$. This supports work by Ulrich and Cole (1987) which proposes pedagogical techniques need to be tailored for different learning styles.

Consistent with Gartner & Vesper (1994), our findings show that indeed the business plan was an effective learning tool, but in contrast we had equal success with business plans developed for either a product or service. Further, some of the failures indicated by respondents to the Gartner/Vesper study, in particular group business plans, and guest lectures were highly effective across all graduates/undergraduates and males/females. (See Table 3.) Course content also was evaluated in both surveys. Business plan development was ranked first across both surveys, all levels and both genders. The second most important content area was idea assessment, again fairly consistent across all groups. For the third rated topic, women indicated that venture start-up information was more important than personal assessment. Further, personal assessment was ranked higher overall by the 1993 group as compared to the 1988 group. (See Table 4.)

From open questions, we were surprised to discover that developing alliances, international competition and changing technologies were issues that students perceived as important that our courses did not emphasize. Further, responses from the 35 students who were involved in entrepreneurial endeavors as of 1993 showed that market research, creating initial customer awareness, generating first sales and obtaining industry information were noted as problems. These topics were not dealt with in depth in our courses. Therefore some of the topics that former students perceived as important to entrepreneurial learning were not being adequately covered in our courses.

CONCLUSION

This paper examined students' perspectives on the perceived value of pedagogy and course content in two separate surveys. Findings showed that consistent with faculty ratings (Gartner & Vesper, 1994), the business plan was by far the most effective technique. The only apparent differences were gender related, where women perceived certain methods to be more effective than males. In contrast to Gartner & Vesper, we found evidence that some faculty reported "failures" (e.g., guest lecturers and group business plans) were perceived successful by our former students.

Implications from this study suggest that it is important for educators to evaluate their course planning against what former students perceive as valuable. The opportunity set for topics must be broad and it must be continually updated to reflect current challenges and trends (i.e. international competition and strategic alliances). Importantly, this research provides evidence that minor variations are apparent depending on level of student (graduate or undergraduate), but more significant differences exist between genders, where a variety of techniques is perceived to be more effective by women than men. Therefore instructors need to include a variety of pedagogics to meet the needs of male and female students.

In particular, written assignments, quizzes and secondary research projects were relatively more useful to women.

Future directions for research emerge from this study. Diversity across cultural dimensions, for instance country of origin, or ethnic background, was not considered. Classroom experiences suggest that case discussions are more effective for students from some cultures, whereas written assignments work better for others. This dimension needs further investigation.

Finally for programs and centers of entrepreneurship, this research shows the importance of continuous program evaluation and assessment. The fact that perceived value of certain methodologies was different for the 1988 and 1993 groups implies that center directors and instructors need to update and experiment frequently. In addition, course content must reflect current environmental trends such as strategic alliances, global competition and changing technologies. As providers of entrepreneurial knowledge and skills, students are our "customers" and we must continually seek out their perceptions of how well we are serving their needs.

Table 1

Perceived Value Gained from Entrepreneurship Courses(1)

Unique Course Copntent Not Available Elsewhere	4.5	4.3
Increased Understanding of Business Management	4.2	4.1
Helped to Decide Whether to Start/Own a Business	3.8	3.7
Integrated Many Business Concepts(2)	--	4.2
Helped to Decide Whether to Join Family Business (n=18)(2)	--	3.9

Table 2

T-Test Results for Differences Between 1988 and 1993 Respondents(3)

Teaching Pedagogy	t-value	d.f.	2 tail prob.
Cases	-0.80	312	.423
Video Presentations	-2.10	308	.037*
Students Oral	2.53	289	.012*
Guest Speakers	-1.47	314	.143
Quizzes	-0.38	307	.706
Readings (handouts)	1.06	311	.291
Library Research	-0.18	307	.861
Written Assignments	2.41	309	.016*
Class Discussions	1.49	310	.138
Business Plan Development	-1.63	312	.103

(1) Average reported on a 5 point Likert Scale with one (1) being 'strongly disagree' and five (5) being 'strongly agree.'

(2) These dimensions were not included in the 1988 survey.

(3) Tests for differences in demographic backgrounds of (1) respondents in 1988 and 1993 groups yielded no significant variations across age, gender, field of concentraiton, or income. However, there were more part-time MBA graduates in the 1988 group.

Table 3

Evaluation of Teaching Methodologies-1993 Sample(4)

Methodology	Total	Grad.	U. Grad	Male	Female
	1993	1993	1993	1993	1993
	(1.56)	(118)	(38)	(94)	(62)
Business Plan Development	4.6	4.6	4.6	4.5	4.6
Guest Speakers	4.4	4.5	4.1	4.3	4.5
Class Discussions	4.2	4.1	4.4	4.1	4.3
Readings (handouts)	4.1	4.1	4.2	4.1	4.1
Written Assignments	3.9	3.8	3.9	3.7	4.1
Oral Presentations	3.6	3.6	3.6	3.5	3.8
Secondary Research	3.6	3.7	3.2	3.3	3.9
Video Presentations	3.5	3.5	3.5	3.5	3.5
Quizzes	2.9	3.0	2.6	2.7	3.2

Table 4

Ranking of Top Three Most Important Topic Areas in Entrepreneurship Courses

Topic	Total	Total	Grad.	U. Grad	Male	Female
	1988	1993				
Business Plan Prep.	1	1	1	1	1	1
Idea Assessment	2	2	-	2	2	2
Financial Projections	3	-	2	-	-	-
Personal Assessment	4	3	3	3	3	-
Venture Start-up Info.	-	-	-	-	-	3

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(4) Average reported on a 5 point Likert Scale with a one (1) being 'strongly disagree' and a five (5) being 'strongly agree.'

(5) A copy of the measures used is available from the authors on request.

APPENDIX A

Please refer to the following list ot topics covered in the entrepreneurship courses to answer questions 1 through 4.

a. Personal assessment
b. Venture-founder fit
c. Venture start-up information
d. Venture franchise information planning
e. Idea assessment & feasibility analysis
f. Business plan
g. Financial
h. Cash flow analysis
i. Capital structure
j. Sources of venture financing
k. Legal and tax information
l. Family dynamics
m. Family business system
n. Succession planning

1. Of the topics listed above, please rank the 3 most useful areas in your business career experience:

(1) (2) (3)

2. Of the topics listed above, please rank the 3 areas of greatest importance in an entrepreneurship course:

(1) (2) (3)

3. Please rate the various teaching methods used in your entrepreneurship course(s) experience. (Please circle.)

	very ineffective				very effective	not used
Cases	1	2	3	4	5	6
Video presentations	1	2	3	4	5	6
Student oral presentations	1	2	3	4	5	6
Guest speakers	1	2	3	4	5	6
Quizzes	1	2	3	4	5	6
Readings (handouts)	1	2	3	4	5	6
Library research	1	2	3	4	5	6
Written assignments	1	2	3	4	5	6
Class discussions	1	2	3	4	5	6
Business plan development	1	2	3	4	5	6

4. Please indicate the degree to which you agree or disagree with the following statements as you reflect on the entrepreneurship course(s) at Boston University: (please check)

Strongly Disagree Disagree Neutral Agree Strongly Agree

a. The course(s) helped me in my career by giving me a better understanding of business management.

b. The course(s) presented useful information not found elsewhere in the curriculum at Boston University.

c. The course(s) helped me to integrate material from other courses.

d. The course(s) helped medetermine if I should start or acquire my own business.

e. The course(s) helped me to determine whether to join a family business.

f. The faculty was helpful to me.

THE INTERNATIONAL TRANSFER OF SMALL BUSINESS DEVELOPMENT PROGRAMS

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ABSTRACT

Setting up small business development (SBD) programs around the world, while very popular, is fraught with difficulty. Most bilateral (e.g, USAID, CIDA, SIDA, etc.) and multilateral (e.g, UNDP, EU, etc.) agencies sponsor SBD projects for several very good reasons - to alleviate of poverty and unemployment, to encourage technological transfer, etc. - but with little long-term success. SBD agencies and programs created by such projects tend to wither as soon as project funds cease and project personnel return home. Most of the local professionals, however, remain in the country as trainers, consultants, and as business managers. The SBD agencies that the projects attempted to create are lost, however. The transfer problems do not appear to be the operations of a SBD agency. It seems relatively easy to train trainers and small business advisors. The transfer problems, however, seem to be in finding methods of creating financially viable SBD agencies. This paper discusses the history of such projects and suggests how more attention to proper project evaluation could result in more self-sustaining SBD agencies around the world.

INTRODUCTION

Since the mid 1970s there has been a remarkable growth worldwide in the number of projects designed to create and sustain agencies to assist entrepreneurs. The United States since the 1970s created over 500 SBIs and over 600 SBDCS, and the number of universities offering entrepreneurship programs went from less than 10 to over 300. Such agencies and programs have attracted a lot of interest, especially in countries with high levels of poverty and unemployment. The collapse of the Soviet Union and dis-satisfaction with socialism in the least developed countries, and the fall of apartheid in the Republic of South Africa also make SBD programs attractive to international aid agencies.

SBD policies and programs not only increased, but also evolved. Most early SBD programs primarily addressed small-scale manufacturing, not small-scale enterprises in general. Moreover, they were usually designed by policy makers trained in economics and political science, and they largely failed to address the needs of individual would-be entrepreneurs. (Loucks, 1988). These early attempts usually involved (a) startup and expansion incentives (e.g., investment tax credits, tax free holidays, etc.); (b) provision of infrastructure (e.g., industrial parks, roads. sewerage. communication facilities, etc.,); and (c) provision of markets (e.g, tariffs and duties on imports, designated national industries, local purchase preferences, subcontracting and joint-venture encouragement, etc.), However, such policies involving incentives, infrastructure, and market protection did little for the "poorest of the poor" because the social classes who were best at taking advantage of such policies were already fairly well off in most countries. Moreover, even where such policies seemed to work, unemployment remained around 40%, economic progress remained stagnant, and poverty remained high.

For more than a decade, many international aid agencies USAID, Canadian CIDA, Swedish SIDA, German GTZ, etc., and non-governmental organizations (NGOS) searched for SBD program models in developing countries that were reaching the "poorest of the poor". The agencies, unfortunately, came up with little. They found few SBD programs that had any impact. (Neck and Nelson). One early study that analyzed 14 national-level SBD programs found almost no evidence to justify spending money on SBD programs. It quoted most national SBD program directors as saying only that small businesses are vital to economic health, that small businesses needed help, that their countries had programs of assistance that they believed in, but they didn't know whether they worked.

The then Federal Republic of Germany commissioned an ambitious study of 53 programs on all five continents. (Harper, 1983) It concluded that it was difficult to distinguish successful from unsuccessful SBD programs. Very few programs monitored the results of their own efforts (e.g., clients' sales, profits, start-ups, survivals, growth, etc.), and those that did monitor their results seemed more interested in doing a good job locally than in publicizing their efforts nationally or internationally. It concluded that, "while there might be successful SBD programs out there, really successful programs were probably community-based and hadn't devoted much effort at gaining widespread recognition." It also concluded that the characteristics that made programs successful might be difficult to replicate. He described them as flexible and inspired, and staffed with dedicated people who enjoyed good local contacts. In effect, it might not be a programs characteristics that would be worth transferring, but its leadership. (Kubr and Wallace, p. 92)

In evaluating their own SBD transfer efforts the agencies found that their projects generally got stuck at the pilot stage. Project funding tended to up before the programs had time to become institutionalized and self-sustaining. Follow-up evaluations usually found only the withered husks of pilot projects that had been launched with great hopes. A meta-study of the efforts of 17 agencies (Loucks. p.85) concluded that few programs had got beyond the pilot project stage. It recommended that transfer efforts must start with a successful model that is then pilot tested and adapted to its new environment. It must next be evaluated before one attempts to replicate it nationally.

We have a lot to learn from successful franchisors. McDonald, for example, before moving to the Soviet Union had years of experience outside the United States, and knew the importance of spending however long it took to build up its infrastructure - training Russian farmers to grow the kinds of potatoes and to raise the kind of beef it needed.

PROJECT DESIGN FOR THE LONG TERM

The seeds of long-term failure are usually sown in the project design. Most SBD projects are designed by "national experts" - professionals who run SBD programs in the countries that fund the projects. The projects include funds both for experts to work in the target country and "fellowships" for target-country nationals to visit and learn in other countries. A vital component that seldom appears in these projects is research in the target country on how the new SBD agency is to become financially viable and self-sustaining.

On the other hand, the project designs are strong in teaching the target-country professionals how to set up training courses and carry out consulting assignments for small businesses. The case of this should be self-evident given the long history of SBIs in teaching undergraduate and graduate students how to carry out small business consulting projects.

Project designs seldom describe the path of the new SBD agency toward financial self-sufficiency. When the project funds begin to flow, the overseas fellowships and the opportunities to work with internationally-recognized professionals generally attract well-trained, highly motivated nationals.

However, at the end of the project the SBD agencies started by these projects usually run into trouble. When the fellowships are finished and the international experts have gone home, the newly trained nationals take up new opportunities to work as trainers and consultants in the private sector and to start their own businesses. So the SBD agency ends up staffed with civil servants who have too little to offer to local entrepreneurs.

To continue to attract, retain and motivate key professionals after international project funding ends, the SBD agency must provide competitive opportunities and compensation. Such compensation comes only from providing services that command "full fees" and organizing the agency so that professionals are fully employed. The range of fee structures include: (a) charging clients full private-sector fees; (b) charging full fees, but subsidizing certain clients; and (c) providing free, full-subsidized services. The full fee structure is by far the most common: small businesses around the world pay full-service fees to their accountants, lawyers, bankers, and other advisors. But of course full-service fees fail to address the needs of the "poorest of the poor" - the original reason for most such projects. Subsidized fee structures are also common. It is often argued that free, fully-subsidized small business services in North America (such as SBI, SBDC, SCORE, etc.) should be phased out. For example, a recent article on small business assistance in Ireland points out, "As budget pressures cause the US government to restrict funding to small business assistance programs in America, the Irish example comes to mind. Assistance programs in Ireland typically charge business customers, and believe that advice that is paid for is more likely to be followed." (Hulpke & Bvmes, 1994, 82)

Thus the challenge in SBD program design is to create self-sustaining agencies that can provide free or highly subsidized service while attracting, motivating, and retaining competent SBD professionals. This can be done only by continually attracting sufficient subsidies, usually from the government, and usually requires that the SBD agency continually demonstrate that it is cost-effective.

It is generally accepted that the firm SBD program outside North America to receive international recognition for its demonstratable cost-effectiveness was the Entrepreneurship Development Program of Gujarat State in India (EDP-1). Started in 1969 to provide capable entrepreneurs with financial assistance. EDP-1 expanded to over 70 centers in India and eventually began offering most of the services identified today with SBD programs - participant identification and selection, achievement motivation training, business opportunity guidance, management training, technical training, financial assistance, and follow-up support. (Patel) By 1985, EDP-1 had trained more than 4,000 entrepreneurs who had started more than 1,500 factories. Untrained entrepreneurs failed seven times as often as the ones EDP-1 had trained (22% as against 4%): the trained ones were more often profitable (76% as against 57%) and the bigger their enterprises, the higher their return on investment. Although it cost EDP-I about $150 to train each person, much of the cost was subsidized, so trainees paid only a token fee.

In the mid 1980s, V.G. Patel, EDP-I's Director, became involved in projects of the World Bank and USAID to test the transferability of the EDP-I model. While Patel was able to demonstrate its cost-effectiveness, it soon became clear that it was too specialized to be widely applicable. It worked only for SBD programs that engaged only in small business startups, because it relied on comparing its success rates with those of startups of untrained founders. The model, while a step in the right direction, was of little helper SBD programs that assist existing businesses, that provide specialized technical or financial assistance, etc.

PLAYING THE BUDGET GAME

A more general model is needed in order to prove to funding agencies in a target country that an agency's benefits exceed its costs. While methodologies for evaluating the success of a business are well accepted, methods for evaluating SBD programs are not. However, the evaluation exercises that SBIS, SBDCs and other federally-funded SBD programs go through may provide a basis for such a model. The game, or dance begins when an administering agency (e.g.. the SBA) advises a SBD program that unless it can provide good benefit/cost ratios to justify its budget, funding will be cut off. The SBD program carries out or commissions an evaluation, and lobbies Congress, with numbers that purport to show that every tax dollar spent on the program not only benefits the clients, but also generates more tax dollars than it uses.

The results of two recent evaluation exercises are summarized in Table 1. (Fontenot, 1994, and Chrisman, 1994). There we see that the SBI program returns 20 tax dollars for every tax dollar it uses, and the SBDC program returns about four tax dollars for every tax dollar it consumes. Both projects, it would seem are good investments for taxpayers.

Critics, however, point out that these figures may be misleading. As Wood (1994., 65) points out: "When the client of a small business assistance program receives service, it receives a 'primary benefit'. The client may then increase its sales and employment - but it generates a genuine benefit to the economy only if the sales and jobs are new to the economy. The distinction between primary and secondary benefits in evaluating small business assistance has not been sufficiently appreciated, and, as a result, existing evaluations are inaccurate." [emphasis added]

Wood argues that the net primary benefit of an SBD program should be measured as the difference between what clients would be willing to pay for a service and the cost of providing that service. For example, if SBI reports were on average "worth" $2,000 to SBI clients and the taxpayers pay SBIs $500 each for such reports, then the net primary benefit would be on average $1,500 per report. A national SBI program that annually produces 6,000 consulting reports for which taxpayers pay $3 million dollars, (and which on average are worth $2,000 each) would produce a net primary annual benefit of $9 million ($12 million minus $3 million). The difficulty, of course, is in agreeing on the "worth" of an SBI consulting report - some reports are so good that clients would willingly pay more than $10,000 to have them done professionally, while others are worthless, except in terms of their educational benefit to the student teams who produce them.

Wood argues further that to make a credible claim of noncancelling secondary benefits, it is necessary to show how gains in sales, employment, and cost reductions are net gains to the economy. Noncancelling secondary benefits come from (a) increased exports, (b) redistribution toward favored groups, and (c) relief of unemployment.

CONCLUDING REMARKS

The transfer of SBD programs from one region to another must start with an understanding of what makes a program successful and robust in its own environment. Research priorities suggested by this framework are many, and include service complexity, demand mobilization, and financial viability.

Service complexity: Much research on socioeconomic programs in poor countries indicates that most programs fail that try to be all things to all people. (Paul, 1983) Rather, successful programs begin by trying to do a few things right, and then gradually diversify their mix of services. The principle is often stated as: first be effective, then be efficient, then expand. Given that most potential entrepreneurs need access to several types of services. research is needed on which services an SBD program should offer fast, how should it create linkages with other programs offering complementary services, and how it should diversify its service mix.

Demand mobilization: Many SBD programs start with belief that, "if we build it, they will come". Yet there is much evidence that unless demand for services is carefully mobilized, the program will be far from fully utilized. Without full utilization of professional staff, fees will be insufficient to retain good staff. Strong arguments exist for mobilizing and organizing a target population and then encouraging its members to participate in designing their own programs.

Financial viability: Far too little attention is given in project design as to how a new SBD agency will become financially self-sustaining after the international project funds dry up. If, as is usually the case, service fees are to be subsidized in order to reach poor clients, then the project should set up a monitoring and evaluation system that will link the agency to funding sources. Then as long as the agency is performing services that have good benefit/cost ratios, someone should be willing to subsidize the agency. The methodologies described in this paper, although controversial and not always properly done, constitute a step in the right direction.

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Table 1: Framework for Comparing SBD Programs
Sources: Fontenot (1994) and Chrisman (1993)

	SBI Programs	SBDC Offices
No. of Service Locations	500	670
Annual Federal Allocation	\$3,000,000	\$75,000,000
Taxpayer cost per location	\$6,000	\$111,940
Clients served annually	6,000	134,000
Taxpayer cost per client	\$500	\$560

Net benefits - primary	$9,000,000	NA
Benefits - Sales Increase	$79,000,000	3,700,000,000
Net benefits - jobs	10,000	65,000
Net Benefits - employment taxes	$440,000	NA
Net benefits - Fed. income taxes	$54,100,000	$127,000,000
Net benefits - sales taxes	$5,500,000	$161,000,000
Total net benefits	$60,040,000	$288,000,000
Benefit/Cost Ratios	20.0	3.84

SMALL BUSINESS AND SOCIAL RESPONSIBILITY: AN EMPIRICAL INVESTIGATION

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ABSTRACT

This paper addresses the increasingly importantissue of socially responsibility of small businesses with special emphasis on business partnerships with area schools. We report the results of a research project that measured the perceptions of area small businesses and high school students regarding a specific partnership program known as the "student card program". The data indicate that though many lacked prior experience with student card programs, they would participate in such programs in the future.

INTRODUCTION

During the last two decades there have been a few attempts to examine small business perspectives on social responsibility (Wilson 1980, Chrisman and Fry 1982, Henderson 1982, Moore 1989). It was found that a majority of small businesses recognized social'responsibility as part of their role and they tend to be more critical of their own behaviors than the general public. Kuratko and Hodgetts (1994) defines social responsibility as willingness to accept responsibility for various social programs. While social responsibility may relate to a wide variety of areas such as the environment, safety, energy conservation, fair employment, quality or value - this paper focuses the important issue of involvement in community activities.

The community involvement by small businesses may take on many forms including donating cash, supporting recreation programs, cooperation in urban renewal projects or sponsoring public health projects. The focus of this paper will be on small business involvement in supporting the education of future America.

Educational researchers have focused a wide variety of methods to improve the achievement levels of our high school students. The U.S. government has taken the lead in sponsoring various seminars to study the "nation at risk" and propose solutions to upgrade our educational system to keep high students motivated to stay in school and develop employment skills. The small business communities around the U.S. have been plotting strategy to determine the level and type of their involvement to help promote literacy and job skills among our youth. The Boston Compact and the Detroit Compact are just two examples of ways in which the U.S. Chamber of Commerce motivate our youngsters to become active learners.

Small business involvement in education often take the form of partnerships that are formal but voluntary agreements between the schools and select businesses for purposes of educational improvement and improving the image of the area businesses. The Boston Compact is such a partnership. In order to be effective, partners should identify their mutually desirable goals and match resources to meet common set of goals and invest resources - both tangible and intangible - to bring about improvements in students' performance. Under the partnership agreements, schools are primarily responsible for education but they ask for help from business partners when appropriate.

Benefits for the businesses from such partnerships are several including improved community relations, better trained employee recruits, easier employee recruitment, improved work ethic among future employees, better company image, access to school facilities and availability of alternative entertainment provided by school choirs, drama or bands. Benefits for schools from those partnerships include more classroom resources, motivated students (by incentives provided by the businesses), better prepared students, a socially relevant curriculum, updated career information and increased employment opportunities for students.

NEED FOR PARTNERSHIPS

At the very least, partnerships with schools help improve the image of businesses in the eyes of the target market. They may even yield a better return on money spent than some other business programs. Furthermore, education is essential to succeed in a market economy such as the U.S. Business is probably in a much better position to understand problems created by human scrap. Remedial education is twice as expensive and businesses will suffer as a result. The most expensive and important asset to any business is its human resources. Hence businesses have a moral obligation to directly participate in the educational process by becoming involved in standard setting, requirements planning and outcome measurement. Quality educational process should include more than the basics of reading, writing and arithmetic; it must emphasize the development of proper attitudes, aspiration levels and commitment.

Employers are the ultimate customers of the products of schools (educated students), the business community should become an increasing partner in improving the quality of schools. Businesses can offer new partnership plans that schools may consider that may benefit all parties involved. The very future of our society depends on investing on our children. Businesses must invest time, talent and resources in schools to help children acquire the skills they need to become productive employees.

Competitiveness of the U.S. Workforce

In the last twenty years the world trade has experienced a dramatic growth and U.S. workers are finding it increasingly difficult to maintain their high standard of living. This is partly due to significant productivity gains realized by several Asian nations which are partially attributed to their educated workforce. Variety of studies have concluded that the future of U.S. depends to a large extent on our ability to improve educational standards of our public schools. Business leaders have realized that U.S. competitiveness very much depends on the existence of a well educated work force, which in turn depends on excellent schools and U.S. businesses are already reaching out to help our school system in any which way they can (Geiger 1991).

For businesses to be involved in partnerships with schools is not just a matter of philanthropy but is a matter of preserving the democratic ideals of the U.S. and protecting (and in certain cases regaining) the nation's longstanding competitive advantages in the global marketplace. Business can provide part of the resources required to help develop programs to improve student skills and attitudes towards work.

AN EVALUATION PARTNERSHIPS PROGRAMS

Empirical evidence documenting the effectiveness of Business/School partnership programs (BSPP) is limited since most partnership programs have been around only for a short time. But, Cohn and Teel (1991) reported that such programs have the potential to increase student achievement. But any such program planning should involve, apart from businesses, students, counselors and most of all, teachers, for optimal results. Farrar and Connolly (1989) observed positive changes in students' achievement, attendance, suspensions, dropouts, and test scores due to their participation in a BSPP. Cronin (1991) observed that BSPP have generally yielded positive results in terms of improvements in attendance, achievement and graduation rates.

The partial success of various local area partnerships has already got the attention of the National Alliance of Business (NAB) which is now actively pushing the schools to emphasize a Fourth R -Workforce Readiness (apart from the three traditional Rs, Reading, Writing and Arithmetic). According to NAB, Workforce Readiness includes reasoning, analytical, creative and problem solving skills, and behaviors such as reliability, responsibility, and responsiveness to new work requirements. NAB encourages schools to be actively involved in shaping future students with an ability to interact with others, those who understand people and events, those who are technically conversant, those with a sense of work ethic, those who possess advanced learning skills, and have developed critical thinking skills, and those who truly are world citizens.

Businesses must compete in a global economy and hence our schools must constant adapt their programs to the changing needs of our society. The ability of U.S. businesses to compete will depend on availability of an educated workforce that believes in flexibility, willing to innovate and has the capacity to make the necessary adjustments (Semerad 1992).

Charner and Fraser (1988) reported that grades do not suffer unless a student works more than 20 hours a week including the weekend. Most of these students tend to work in the retailing sector. While working during school helps to promote desirable work habits, relationships between family members are not significantly affected. But, Hirsch (1992) noted that one key obstacle to success to any specific school/business partnership is the educators' fear that businesses might put undue pressure on them to produce skilled labor rather than "educated" citizens and an atmosphere of openness must be created in the community before improving student performance.

Business partnerships should will be aimed at making the retail "value-added component" both effective and efficient. With schools willing and able to deliver "retail employees" who have the proper values and attitudes required in a "global environment", the retail costs incurred due to training and turnover will be significantly reduced. Products of such partnerships should produce informed consumers with higher expectations who would demand value for their money/credit, thus enhancing the quality of products/services offered by retailers. This paper is an attempt to measure perceptions of one such business partnership program with area schools by both businesses and students.

Renaissance schools program

Business principles of recognition must be applied at the schools to motivate scholastic achievers. Renaissance Education Foundation is a private non-profit foundation sponsored by corporations such as Proctor & Gamble, Hershey Foods, Ernst & Young, Jostens among others. The main event of the year for this foundation is when it brings school educators together to provide them information on launching student recognition programs based on business principles of rewarding achievement. The grade point average system is the most widely recommended system in Renaissance schools. Students exceeding a certain predetermined grade point average in a marking period get an achievement card in their names that entitles them to free reserved parking at the school, free lunch at the school cafeteria, priority registration, discounts from the school bookstore, discounts from local retailers, discounts in selected restaurants and other privileges. The Renaissance schools found that their drop out rates decreased by 30 percent and the number of students in the honor roll increase by about 10 percent. More than 2000 schools are participants in the Renaissance schools program (Szabo 1992).

The RJR Program

U.S. businesses spend over $50 billion a year on education, over half of it on remedial education. Recently RJR Nabisco decided to build partnerships with schools for increasing student achievement. It was found that much of the difficulty stems around the unwillingness of the education bureaucracy to change with times and locking out innovations. Under the RJR plan teachers who set up and implement innovative programs aimed at promoting student achievement are entitled to receive monetary and nonmonetary awards. RJR program is aimed at encouraging school principals to treat their schools like any other enterprise serving the public--including students, parents, the extended community and employers.

Gold Card Program

Students obtaining a certain grade point average receive a Gold Card. Students holding a Gold Card are eligible to receive discounts in local stores, theaters, restaurants and even zoos. The Gold Card incentive is working in several school districts in Michigan. The Gold Card motivated students to increase their grade point averages by the discount it promises. This program is not just aimed at the bright and the best of students. The program provides for Silver and Bronze cards which are awarded to students whose grades rise a specified level each marking period. These cards also earn discounts from local retailers ranging from 10 to 25 percent. Students may be eligible to attend area athletic program at a reduced rate. These discount cards work since they serve as status symbols among peers and holding such cards show that they have worked hard at achieving a certain goal. The achieving students also get a decal to be displayed in their car windows as a signal that they care about quality education. In certain school districts in Michigan the criteria for the Card includes not only the grade point average but also attendance and good citizenship.

Ponderosa Steakhouses Encourages Kids to be in School

Ponderosa Inc has developed and implemented a Blue Ribbon/ Attendance Incentive Program encouraging students to develop good attendance habits in an attempt to lower dropout rates in the future grades. For students who have perfect attendance students in participating schools are rewarded with a free meal at a Ponderosa Steakhouse.

Pizza Hut BOOK IT Program

Pizza Hut has developed a reading incentive program that is implemented through partnerships with various school districts. Monthly reading goals are determined. Students exceeding those outside reading goals are rewarded with free pizza, posters, buttons and certificates. This program is met with a great deal of success across the U.S.

GUIDELINES TO SUCCESSFUL PARTNERSHIPS

Offering Warranties/Guaranties

Many school systems around the U.S. are offering warranties on basic abilities of their students. The students may be issued wallet sized cards testifying to competence in basic skills and readiness to work at their levels. Employers can demand that students receive free retraining if they identify academic skill deficiencies on the job. The school stands guarantee to students' basic skills, thinking skills, and personal qualities that are needed to contribute productively in the workplace. To get a wallet-sized warranty card students may be expected to meet specified attendance, attitude and grade criteria.

In one particular school district only 36 percent of the potential candidates qualified for the warranty card. Some of these warranty programs go even a step further. They guarantee that the students have received training in job skills covering problem solving, dealing with criticisms, team playing and group decision making.

Since warranty criteria are often setup with often with the cooperation of local retailers, only a few employers seem to be exercising their warranty rights. A retailer sent back a checkout clerk to brush up on computational skills. Most research indicates that the Business-Education Partnerships to promote warranty programs is bound to succeed since under this system educators become more committed to producing the products right the first time, rather than do rework on the returning students to teach skills they should have learnt to begin with (Goldman 1992).

Offering Student Incentives

Achievement cannot be improved without student incentives. Employers should hire youth based on grades and recommendations. Schools must make grades meaningful to employers. Schools should rate students for effort and improvements (Rosenbaum 1989).

Recognizing Partner's Contribution

A partnership is where everyone should benefit. Give recognition and show appreciation for what your partners contribute. Talk about ways to improve schools with your partners. Together develop a plan of action with realistic priorities, goals and objectives. Concentrate on building and utilizing human resources to the maximum.

Common Methods of Involvement

Businesses must get involved at both micro and macro levels in the arena of public education (Goldberg 1989). Some popular types of retailer-school interactions include field trips, guest speakers, employee mentors, and paid work experience in local retail stores to supplement regular classroom learning, since reward as motivation in performance level and concrete reward was more effective than symbolic reward (Reller 1987, Sharma 1986).

PERCEPTIONS OF STUDENT CARD PROGRAMS

Most of the Business/School partnership programs have focused on job/scholarship guarantees to students meeting certain established criteria. But programs that emphasizes special retail discounts for "special" students are relatively new. The educational system needs to be redesigned to accommodate the planning and the implementation of the student card program, requiring the cooperation of the area schools. But unless "Student Cards" are widely accepted within the retail trade area, the partnership is unlikely to succeed. Therefore, the level of business support for proposed "Student Cards" warrants investigation. With the above objectives in mind a survey of area businesses and students was commissioned.

Survey Methodology

A 26-item survey was designed to measure the attitudes and opinions of area businesses, schools and students. The initial questionnaire was pretested for relevancy, accuracy, and completeness. Responses were obtained on a 5-point agree-disagree Likert scale with 1 representing strong agreement with the statement and 5 representing strong disagreement. A stratified sampling design was utilized to get a representative sample of the population being studied. A total of 142 responses were obtained out of 330 students contacted, for a response rate of 47 percent. However, out of 200 businesses contacted, only 56 responded, for a response rate of 28 percent. Student respondents were high school seniors representing two different area high schools. The surveys were given out to be collected at a later date.

Results

Tables 1 through 6 provide a summary of major findings of this study. Overall, there seems to be a great deal of interest in a business-education partnership program aimed at issuing student discount cards to used at participating area businesses. Though many lacked prior experience with student card programs, they would like to participate in such programs in the future. There was strong agreement among the groups that a student's attendance, grade point, personality and extra-curricular involvement should be included in determining student card eligibility.

It was expected that student card program will provide a good deal of publicity for the retailers while at the same time contributing to increased student achievement. The hypothesis that the student card holders may indeed lack skills in the areas of leadership or human relations was not supported by findings of this study.

The view that retailers may even go a step further in giving preferential treatment in employment for student card holders was also not supported. In summary, the findings of this study indicate that both students and retailers should expect to reap rewards from a well conceived "student card" program. Most notably, retailers included in this survey overwhelmingly support the notion of offering retail discounts for student performance.

CONCLUSIONS AND IMPLICATIONS

Area businesses stand to gain a great deal from their alliances with neighborhood schools. It is in their best interest to participate in the planning and the implementation of student card programs. There seems to be considerable support from businesses surveyed for the student card program. It is comforting to know that the enthusiasm of area businesses is echoed by high school students as well. The costs are manageable and the long term payoffs seem high. Fostering partnership programs such as special student discount cards for high achievers should be a high priority for all small businesses.

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Table 1: Average Scores Across Awareness Dimension (1)

Items	Businesses	Students
Partnership Awareness	2.9	2.8
Business Interest	1.9	1.8
Positive Attitude	2.0	2.1
Effectiveness	2.0	1.8
I. Awareness/Interest	2.2	2.1

Table 2: Average Scores Across Involvment Dimension (1)

Items	Businesses	Students
Previous Experience	3.6	4.0
Current Involvement	3.5	3.9
Future Participation	1.9	1.8
II. Involvement	3.0	3.2

Table 3: Average Scores Across Performance Dimension (1)

Items	Businesses	Students
Attendance	1.8	1.9
Grade Point Average	2.1	2.0
Tardiness	2.2	3.0
School Athletics	3.3	3.7
Non-Curricular Activity	2.3	2.5
Personality	2.6	2.2

III. Performance	2.4	2.6

Table 4: Average Scores Across Outcomes Dimension (1)

Items	Businesses	Students
Publicity for Business	1.6	2.0
Student Achievement	2.0	2.0
Student Improvements	1.8	2.0
Student Motivation	2.2	2.0
IV. Expected Outcomes	1.9	2.0

Table 5: Average Scores Across Quality Dimension (1,2)

Items	Businesses	Students
Leader Skills	3.6	3.8
People Skills	3.0	3.4
Time for art-time Work	2.3	2.6
Minority/Discrimination	3.7	4.0
V. Education Quality	3.1	3.4

Table 6: Average Scores Across Implementation Dimension (1)

Items	Businesses	Students
Leader Skills	2.0	1.8
People Skills	2.5	3.7
Time for Part-time Work	3.1	2.8
Minority/Discrimination	2.4	2.0
	2.3	2.5
VI. Program Implementation	2.4	2.5

(1) Averages derived from a scale of 1-5, with 1 = Strongly Agree; 5 =Strongly Disagree. The numbers within brackets represent variances.

(2) Items 18, 19 and 21 (see Figure 1) were "negatively" stated and hence the averages must be interpreted with caution: there was disagreement (3.6-3.8) that "Students-Card holders may lack Leader skills."

PUBLIC MONEY FOR SMALL BUSINESSES: AN EVALUATION OF EVANSVILLE'S METRO SMALL BUSINESS ASSISTANCE CORPORATION

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ABSTRACT

The Metropolitan Small Business Assistance Corporation (MSBAC) is a tax exempt certified development corporation. Its purpose is to use public money to aid the growth of small businesses in the Evansville Indiana area. In order to accomplish the mission described above, MSBAC must operate like a bank with both a risky loan portfolio and a social purpose.

This paper seeks to evaluate MSBAC in terms of its own stated purposes through an analysis of its lending history between 1983 and 1993. That analysis shows that MSBAC performs it basic functions well. Worthy small business projects are gaining access to financing. The lending activity is being managed well. Loan losses are low and funds from repaid loans have been recycled to make additional loans.

Analysis of the data also suggests that MSBAC should focus more upon the small loan segment of its business. Small loans create equal numbers of jobs more cheaply than large loans. Were more small loans to be made at the expense of some larger loans, the community would have more jobs at a lower cost.

INTRODUCTION

The Metropolitan Small Business Assistance Corporation (MSBAC) is a tax exempt certified development corporation. Its purpose is to use public money to assist the growth of small businesses in the Evansville, Indiana area. MSBAC deals with small businesses that are unable to obtain sufficient financing for capital improvement or expansion through conventional channels. Its resources come exclusively from government grants set up for this purpose. Often MSBAC combines its resources with private financial institutions and SBA loan guarantees.

MSBAC loans are often collateralized by inventory, accounts receivable, equipment, real estate, and personal guarantees of the owners. When other institutions participate, MSBAC's security interests are subordinated to the private lenders. Loans are evaluated in terms of both the economic value of the business project and the number of jobs that the project will create or save. MSBAC looks to prospective cash flows as the primary source of repayment.

In order to accomplish the mission described above, MSBAC must operate like a bank with both a risky loan portfolio and a social purpose. It must discriminate between projects that are not realistic and projects that are worthy but not suitable for conventional financing. If MSBAC is too conservative, the capital needs of small business will not be met. If MSBAC is too lenient, it will waste public money. If it does not seek both job creation and business development, it will not serve the social purposes which are its foundation.

During the past eleven years, MSBAC has attempted to fulfill its mission by participating in 139 loans to small businesses totalling $12,104,486. This activity has resulted in the creation or preservation of 1713 jobs within the local community. The cost to the taxpayer has been $102,521 in losses on nine defaulted loans. MSBAC's operating costs have been $831,807.(1)

This paper seeks to evaluate MSBAC in terms of its own stated purposes. The lending history of MSBAC between, I 983 and 1993 was analyzed to find answers to the following questions.

1. Is MSBAC managing its share of the public's money well?

2. Is MSBAC successfully funding small businesses that could not get adequate financing from conventional sources?

3. Is MSBAC creating jobs through its activities?

4. Is the cost of the jobs so created reasonably low?

MSBAC AS A LENDER

The performance of a bank is evaluated in terms of profitability, loan quality, and risk. Profitability is measured by the rate of return on the assets employed or the rate of return on the equity capital of the banking corporation.

Since equity is an idea that does not apply well to a tax exempt company, MSBAC will be evaluated by its rate of return on the total assets of the company (ROA). The assets of MSBAC primarily consist of cash and investments, loans receivable from small business clients, and a small amount of office equipment. During the period studied here, total assets have grown from less than $200,000 to more than $2,700,000 as shown on Exhibit 1. Grants from governmental agencies have financed all of this growth.(1) The rate of growth was rapid between 1983 and 1988, but has been slower since 1989.

The income of MSBAC consists of interest, service fees, and grants, in agreement with the principles of fund accounting. Some of the grants made to MSBAC contained a requirement that the income generated from the grant be returned to the grantor at an appropriate time. Revenue is reported by MSBAC in its financial statements net of these returns.

In order to evaluate MSBAC as a lender, the revenue as reported must be adjusted so that the resulting number compares to the data that a bank would report. Two adjustments were necessary. First, grants were removed from income since, in a taxable corporation, they would be treated as contributions of capital. Second, income returns to grantors were added back since they represent income from the loans made by MSBAC. These returns are more analogous to dividends than revenue reductions. The resulting modified income numbers represent the profits from the lending activity.

Using adjusted income figures, MSBAC has been profitable in all but the first three of the eleven years reviewed here. Net income has ranged from a loss of $57 thousand to a gain of $73 thousand as shown on Exhibit 2. ROA was negative during the first three years but has varied from 1.6% to 2.6% since then as shown on Exhibit 3.

For the eleven years taken together, income totaled over $345,000 for an average ROA of 1.6%.(1)

These rates of return are better than a good bank, poorer than a good small loan company, but within the realm of possibilities for both.

Loan quality has also been good over the eleven years studied. MSBAC has participated in 139 loans during the period which totaled $12,104,486. Nine of these loans have resulted in default amounting to losses of $102,521. More than 40% of the loss occurred in 1984. Since that time losses have remained below 1.3% of outstanding loans.'" This number shows loan quality that many banks would be proud to report. Federal government data for the banking system in recent years show overall losses for commercial loans in the range of 0.5% to 1.0%.

Risk is commonly measured in terms of loan to deposit ratio and loan quality. MSBAC seeks grants for the purpose of funding loans. These grants are the closest analogy to bank deposits. Given MSBAC's purpose, all of the grant money received in excess of operating expenses should be dispersed as loans. In addition, some of the money originally lent should have been repaid and lent again.

Exhibit 4 shows, on a cumulative basis, the ratio of new loans to grants in excess of operating expenses. Since 1987, this ratio has been greater than

1, showing that some of the grant money was recycled after the initial loan was repaid. Exhibit 5 shows the cash position of MSBAC.(1) Liquidity has been rising during the entire eleven year period studied. This shows that the repaid loans are not invested as aggressively as the new money obtained from grants. MSBAC activities during 1994 have begun to address this problem.

From a purely financial point of view, the performance of MSBAC has been good. Profitability has been high, losses have been low, and the money provided has been used to promote small business growth. The low rate of loss suggests that the lending standards are too conservative. The loss rates on unbankable loans look similar to data published by some banks for conventional commercial loans. Conservatism also shows in that money from repaid loans does not seem to be lent out as aggressively as does new money from grants.

MSBAC AS A JOB CREATOR

MSBAC operates as a publicly funded Certified Development Corporation. Presently, there are about 400 such corporations in operation dispersing a federal allocation of $1.5 billion. Many of these corporations, including MSBAC, also disperse additional money appropriated by state and local governments.(3)

The stated purpose of the Certified Development Corporation program is the creation of new jobs. The reports submitted by these organizations to both the government and the public highlight job creation and preservation. Both the number of jobs and the cost of their creation is shown. The government reporting requirements define the number of jobs created as the sum of the new jobs and the existing jobs salvaged by the loan. The formula for the cost of job creation is the number of jobs divided by the total amount of the loan made.(2)

The performance of MSBAC during the last eleven years is summarized in Exhibit 6. Using government definitions, 1,71 3 jobs have been created by $12,104,486 in loans for an average cost of $7,084/job.

Exhibit 6
Job Creation By MSBAC

Year	No. Loans Made	Total Amount Of Loan	Average Size Of Loan	No. of Jobs Created	Loan/Job
1983	15	$1,811,477	$120,765	292	$6,204

1984	22	$1,721,051	$78,230	226	$7,615
1985	10	$981,790	$98,179	59	$16,841
1986	19	$2,42.557	$133,819	153	$16,618
1987	14	$890,361	$63,597	39	$22,830
1988	12	$1,586,400	$132,200	618	$2,567
1989	9	$496,750	$55,194	20	$24,838
1990	5	$195,000	$39,000	39	$5,000
1991	11	$867,000	$78,818	35	$24,771
1992	9	$311,000	$34,556	41	$7,585
1993	13	$731,100	$56,2381	91	$3,828
Total	139	$12,134,486	$87,298	1,713	$7,084

Calculating the cost of a created job in this way is misleading. MS@AC disburses money in the form of loans. MSBAC fully expects the loans to be repaid with interest. If MSBAC made a loan, jobs were created, and the loan repaid with interest, it can be argued that there was no cost to the public other than the cost of operating MSBAC. The opportunity cost to the government of the grant money was less than the interest charged to the small business borrower. The cost of job creation would be better defined as the value of defaults suffered by MSBAC added to its cost of operation. Defaults between 1983 and 1993 totaled $102,521. If we add an estimated provision for future losses from current loans equal to 50% of all loans not now current, losses from the program would be $144,715. The cost of operations during those eleven years was $831,807.(1) Combining these numbers, the cost of a job created or salvaged by MSBAC is $570. Compared to the cost of unemployment insurance, the cost of welfare, or the anticipated employment tax revenue, this is an attractive result.

MSBAC has participated in projects ranging in size from $2,665 to $820,000. (1) This span includes businesses of widely differing nature and sophistication. The data from all of these projects were analyzed to determine whether job creation depended on the size of the project. Two linear regressions were used. The results are summarized in Exhibit 7.

The first regression attempted to predict the number of jobs created as a function of the loan size. The coefficient of determination (R2) is 0.078 which is quite low. The scatter diagram shown on Exhibit 8 confirms that loan size is a poor predictor of the number of jobs created.
The second regression attempted to predict the cost of job creation as a function of loan size. In this case, the coefficient of determination is 0.28 (R=0.53) and the slope of the regression line is positive (0.11).

Exhibit 7
Summary of Regression Results

	Regression #1	Regression
Independent Variable	Loan Size, $	Loan Size, $
Dependent Variable	Number of Jobs	Cost of Jobs
Y Intercept	2.84	5885
X Coefficient	6.20e-05	.11
R^2	.078	.28
Number of Observation Pairs	128	128

The cost of job creation increases as loan size increases.
The scatter diagram shown on Exhibit 9 confirms this.
Small projects are more efficient creators of jobs.

Each of these conclusions suggests that the social goals of MSBAC are best served when its funds are applied to small projects requiring small loans. For any total amount of loan volume, smaller average loan size creates more jobs at a lower cost.

MSBAC AS A SOURCE OF CAPITAL

In order for a small business to request funding from MSBAC, it must first be turned down by a bank. Sometimes, banks refuse the entire project and the business turns to MSBAC for financing. On other occasions, a bank agrees to lend some of the required amount and the business looks to MSBAC for the rest. Conventional wisdom suggests that those projects partially financed by a bank carry lower risk. This belief relies upon the willingness of the bank, after its analysis, to participate with MSBAC. The bank demands that .MSBAC take a subordinate position and, as a result, views the MSBAC funds as similar to equity.

The Chi Square method was used in a 2 x 2 contingency table to see if defaults were related to bank participation. The results of this test are shown on Exhibit 10. As can be seen, the null hypothesis cannot be rejected.

In other words, the loans rejected by banks are no more risky than those accepted by banks in participation with MSBAC.

Exhibit 10

Summary of Chi Square Tests

NULL HYPOTHESIS NO. 1: Businesses which must borrow from MSBAC alone are no more likely to default than businesses that may borrow from both banks end MSBAC.

	Loans by MSBAC Alone	Loans by Banks and MSBAC	All Loans
Defaults	6	3	9
Good Loans	67	63	130
All Loans	73	66	139

Chi Square calculated: 1.124

Chi Square for 5% significance level: 5.9

Null hypothesis cannot be rejected

NULL HYPOTHESIS NO. 2: The rate of default on small loans is no higher than the rate of default on larger loans.

	Loans <425,000	Loans >$25,000	All Loans
Defaults	7	2	9
Good Loans	73	57	130
All Loans	80	59	139

Chi Square calculated: 1.9261

Chi Square for 5% significance level: 5.9

Null hypothesis cannot be rejected

Another belief commonly held is that small loans are more risky than large loans. This belief, too, was tested from the MSBAC data using a 2 x 2 contingency table. The dividing line between small and large was set first at $25,000. The table compared loan size and risk measured by default. The results are shown on Exhibit 10. Again, the null hypothesis cannot be rejected and it appears that there is no relation between loan size and default. Similar result was obtained using $15,000 as the dividing line instead of $25,000.

The issue of small loans being riskier was also analyzed using a T-test. The mean size of defaulted loans was compared to the mean size of loans which did not default. The results, summarized on Exhibit 11, show that the average defaulted loan is significantly smaller than the average non-defaulted loan at a high level of significance. In other words, loans which default tend to be smaller.

Exhibit 11
Results of T-Tests

NULL HYPOTHESIS NO. 3: The mean size of loans which defaulted is the same as the mean size of loans which did not default.

	Defaulted Loans	Good Loans	All Loans
Number	9	126	135
Mean size,	$26,222	82,621	
Standard Deviation,	$44,198	161,698	

T Statistic: 2.7372
Probability > T: 0.0105
Hypothesis no. 3 is rejected

The low default rate for all MSBAC activity affects both Chi Square results. The total number of defaults during the eleven years studied is 9 out of 139 loans. With such small numbers, tests based on nominal data are not very powerful. The low default rate makes it difficult to conclude that any one segment defaults at a significantly higher rate than any other segment. It is possible to conclude, however, that since the entire group of 139 loans were rejected by banks, the bank loan review standards are very conservative. It is also possible to conclude that MSBAC loan review standards are very conservative, and to ask whether the community would be better served if more loans were made and the loss rate allowed to increase a little.

CONCLUSIONS

MSBAC is performing it basic functions well. The basic premise supporting M SBAC, and other similar organizations, is that many worthy small business projects cannot obtain funding through conventional channels. The data for MSBAC clearly support this premise, at least for the Evansville, Indiana area. MSBAC operation has allowed over $12 million in small business financing that would not have occurred otherwise. As a direct result, the community has benef itted from the creation of more than 1700 jobs at a real cost of less than $600/job.

The lending activity is being managed well. Loan losses are low and funds from repaid loans have been recycled to make additional loans. Viewed as a high risk lender, the performance numbers for MSBAC are good.

Since the basic purpose of MSBAC is social, it is fair to ask whether the numbers are too good. Analysis of the data suggests that MSBAC should focus more upon the small loan segment of its business. Small loans create equal numbers of jobs more cheaply than large loans. Were more small loans to be made at the expense of some larger loans, the community would have more jobs at a lower cost. The data further suggest that the risk of small loans of this kind is no worse than larger loans. Since loan losses are very low, a modest relaxation of credit standards to attract more small loans would be a reasonable strategy for MSBAC to adopt. Should MSBAC elect to consider this strategy, additional study should be done. Records of rejected loans should be analyzed to determine the rate of rejection, the credit worthiness of the rejected loans compared with the accepted loans, and the criteria used for rejection.

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THE ECONOMIC IMPACT OF AN INDUSTRIAL INCUBATOR ON THE LOCAL ECONOMY, A LONGITUDINAL STUDY REVISITED

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ABSTRACT

A description of the economic and political cooperation that encouraged a consortium of the City of Akron, Summit County, the University of Akron, and the private sector to initiate an industrial incubator is reviewed. This study updates data regarding dales, payroll, employment, and economic contributions to the local economy form previous studies conducted in 1987 and 1991.

INTRODUCTION

The purpose of this paper is two-fold. The first is to review the economic and political cooperation that encouraged a consortium of the City of Akron, Summit County, the University of Akron, and the private sector to initiate an Incubator project. The second is to update data presented in a previous study in 1987 regarding the sales, payroll, employment and economic contributions to the local economy.

The term "incubator," a relatively new concept, refers to providing a new business with special types of assistance during an "enriched" environment that can include (1) low cost, short-term leases; (2) secretarial and word processing services; (3) a support network of professional and consulting services; and (4) access to financing (Gumpert, 1985). The recent estimate of the number of incubators in the United States is 100, and this number is rapidly growing (Gumpert, 1985). A 1984 study estimated that most incubators are publicly owned and have been in existence for one year or less (Campbell, Kendrick, and Samulson, 1985).

FOUNDERS OF INCUBATORS

Federal, county, and governmental agencies, chambers of commerce, private corporations, universities, hnd community groups are among the organizations that are establishing incubators. A widely cited private corporation starting incubators is Control Data, which operated 16 such centers in various locations. One of its facilities is an old cigar factory in Charleston, South Carolina (Nelton, 1984). Two important characteristics of

Control Data's Incubators are (1) they offer new businesses a place to operate and (2) they are viewed as a way of renovating old buildings and revitalizing depressed areas.

The Small Business Administration has been involved in the development of incubators through a networking role. In a Market Area Plan pioneered by SBA Region V., the S.B.A. has been instrumental in founding a number of incubators (Durkin, 1984).

Broome County, New York, has been a county government that has formulated an incubator (Gissy, 1984). The goal of its formulation has been to provide technical expertise and advice to newly formulated businesses. The results of the county's efforts in its incubation activities have not yet been published.

Rensselaer Polytechnic Institute, also in New York, is an example of a university founding an incubator (Phalon, 1983). Like the one in Broome County, its activities have included providing housing and advice. In addition, RPI has also supplied venture capital.

Private incubators are the oldest, with a median starting date of March 1983. They are followed closely by university facilities, whose median starting date is July 1983. Private facilities generally have more tenants; their median is 21. They are followed by university facilities, with a median of 14, and public facilities, with a median of 7. 8. Consequently, private facilities are much larger. Their median size is 154,000 square feet compared with a median sized of 57,000 square feet for universities and 36,000 square feet for public facilities (Allen, 1985).

PREVIOUS RESEARCH - A REVIEW

Studies dealing with the economic importance of incubators on a local economy have been scarce. However, there have been two previously published studies in which the characteristics of incubators were analyzed. The first is a study of the role incubator industries played in the local economy of Westfield, Massachusetts (Armstrong and Mullin, 1984). The study is a result of a survey of the owners of 25 small firms that have been in business for fewer than ten years, manufacture a product, and are doing business in Westfield. The results of this study indicated that these firms are not really typical of what is now being defined as incubators. None of these firms received financial assistance from government sources, most had a customer waiting when they started, and most operate under poor physical conditions. Their employees are primarily recent technical school graduates and family members. It was found that this incubator increased employment in the city, but it did not have a very significant impact on employment. An important recommendation of this study was that the Chamber of Commerce develop marketing and management training programs for the incubator.

Another important study of incubators was done by Allen and Rahman (Allen and Rahman, 1985). They surveyed 12 Pennsylvania incubator facilities. Of these, eight had unique financing arrangements and eight incubators had provided rental space at below market rates. But the following important consulting services were not unusually provided: tax, advertising, marketing, computing, and information services. The Allen and Rahman study provides the following contributions to the understanding of incubators:

* incubators were geographically dispersed, thereby minimizing unique regional characteristics;

* relationships between the new business and the incubator were described in more depth;

* more attention was given to the organizational structural characteristics and the objectives of the incubator facility.

Carroll concluded that the beneficial economic impact of continuing the incubator project can be categorized as primary and secondary. The primary impact is the initial creation of new jobs and the diversification of the regional economy. Accompanying these new jobs is a higher level of local income and expenditure. From this primary effect on the region flows the secondary result, which is the economic multiplier effect. This impact is in terms of both employment and income expenditure (Carroll, 1986).

Brooks noted that as firms outgrow the economic incubator and its hand-on assistance, they also contribute to the local economy by feeding into the real estate model (Brooks, 1986).

Campbell, Kendrick, and Samulson state that economic development strategists should view the conversion of entrepreneurs' ideas into new businesses and as a productive force for local job creation and economic growth (Campbell, Kendrick, and Samulson, 1985).

Control Data is among the organizations that are sponsoring small incubators and viewing incubators as contributing to the economic development of areas by renovation an older building, and revitalizing depresses areas, and potentially reducing significantly new business failure, generally about 50% in the first five years (Nelton, 1984).

Demuth points out that private companies often build small business incubators to receive such economic benefits as: (1) the opportunity for profits by investing in new companies, (2) profits from real estate appreciation, (3) management or franchise fees (Demuth, 1984). Merrifield concludes that over 200 business incubators have been formed and have contributed to the generation of jobs, new wealth, and tax revenue (Merrifield, 1987).

HISTORY OF THE AKRON-SUMMIT INCUBATOR 1983 - MARCH 1991

The Beginning

On December 1, 1982, the City of Akron, County of Summit, and the University of Akron cosponsored a $352,000 renovation of 42,000 square foot building into Northeast Ohio's first business incubator facility. The objective of the incubator was to assist entrepreneurship, fledgling businesses, and high growth potential firms in the economically depresses city of Akron, Ohio. This facility was located adjacent to the University of Akron's campus and was leased by the university and subleased to the city for seven years at the cost of insurance and taxes. This city was selected following an extensive search that included an examination of twenty-six other vacant or underutilized facilities within the city. The search was funded as part of the federal government's Economic Development Administration's Auto Community Adjustment Program (ACAP) grant received by the city in 1980-81.

On November 1, 1991, the Akron-Summit Incubator moved into a new 80,000 square foot facility. The new facility is owned by the City of Akron. The old facility was abandoned, then taken over by the University of Akron.

The new facility provides 30,000 square feet at $2.25 per square foot plus electricity for heavy manufacturing, 30,000 square feet at $2.50 per square foot for light manufacturing and 20,000 square feet at $3.00 to $4.00 per square foot for office work. The cost of the old facility was $2.00 a square foot regardless of the type of business.

As of April 4, 1991, the Incubator has thirteen tenants, four of which came from the old facility. To date, twenty-four tenants have been successful at the facility while four have failed.

Rehabilitation - Maintenance Funding Phase

The rehabilitation of the facility began immediately and was funded by a rehabilitation budget that consisted of Summit County Capital Improvement Program (CIP) funds of $140,000, which were generated from the sale of county owned property, and Community Development Block Grant (CDBG) funds from the City of Akron for the identical amount of $140,000. These funds were expended on eight major contracts that included roofing, painting, doors/windows, electrical, heating, plumbing, elevators, and a sprinkler system. Private Industry Council (P.I.C.) funds totaling $72,000 were applied toward a Building Maintenance Program (BMP) that permitted student workers to gain on-the-job training through maintenance jobs in the facility. P.I.C. funds were provided under a Comprehensive Employment & Training Act (JTPA) provided by the U.S. Department of Labor and administered by the local P.I.C.

Selection of Tenants

Potential tenants for the Incubator were screened by a Board of Governors composed of city, county, university, and P.I.C. representatives. The following eligibility categories were used as a screening process for potential tenants:

* manufacturing or assembly operation,

* area-wide distribution of product or services,

* research and development operation, or

* job generating (i.e., high job growth Potential).

The potential tenants were also limited by the following criteria:

* the operation could not be excessively noisy (i.e., heavy stamping) or excessively dirty or dusty (i.e., painting or sanding), and

* the operation must meet common power and utility requirements.

The staff resources of the city, county, and university were used to market the program and identify potential tenants who were then required to complete a thorough application (including a business plan) that was reviewed by the Board of Governors. The Board also screened the applicants for the interviewing phase. The city, county, and Akron Regional Development Board (ARDB--Chamber of Commerce) also had Industrial Call Programs (I.C.P.) that were utilized to identify potential tenants.

FINDINGS

Tables I and II list the present tenants and graduates of the Akron/Summit Incubator as of December 1993.

Since the April 1983 beginning of the Incubator to December 1993, thirty-five firms have been tenants. Twelve have succeeded (Table II); sixteen continued as tenants (Table I); one was absorbed, and six have failed due to either financial problems, illness, or lack of growth.

Over the ten years, 1983-1993, the number of employees employed by the tenants increased from 60 to 422, or 600% increase. By comparison, the employment in the Akron area during the period of April 1983 through December 1993, increased from 215,100 to 300,000, a 39.5% increase. The incubator's annual payroll for the same period blossomed to a hefty $9,216,800. (The 1993 payroll for the Akron area was approximately $5,572,000,000). Table II also reveals that sales increased from $1,353,000 to $28,813,600, an increase of nearly 20 times!

The average weekly earnings ranged from a low of $41.19 for the office service firm (unskilled) to a high of $817.31 for the electronic assembly firm (semi-skilled). These payroll figures compared favorably with the 1993 average payroll for the manufacturing, transportation, and wholesale and retail trade gross weekly earnings (Table III).

Of the twenty-eight firms listed in Tables I and II, five firms employed individuals ranked unskilled, three firms employed individuals ranked unskilled to semi-skilled, twelve firms employed individuals ranked semi-skilled, one firm employed individuals ranked semi-skilled to skilled, and seven firms employed individuals ranked skilled. It is interesting to note that of the twelve successful graduate firms (Table II), each represents one of the following skill levels: unskilled, unskilled to semi-skilled, semi-skilled, semi-skilled to skilled, and skilled.

It is also interesting to note that of the twelve graduates of the Incubator, four are heavily involved in the global market, whereas of the current tenants, only four of sixteen firms are involved in the global market. The global orientation has been emphasized by the screening committee over the past six years.

CONCLUSIONS

The data regarding job generation, payroll, and sales reveals some economic contributions to the local economy. It should be emphasized that the original investment of $352,000 in 1983 generated, then years later, a $9.1 million payroll that resulted in an $28.8 million sales figure.

Evidently a rising economy, the extensive tenant screening process, and resources available to the tenants contributed to the positive economic contributions of the Akron/Summit Incubator to the local economy over the past ten years.

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Table I

CURRENT TENANTS
AKRON/SUMMIT INCUBATOR
Dec - 93

Current Tenents Listed	No. of Employees		Current	Sales
By product/or Service	*Beginning	Current**	Payroll	Beginning
Polymer Coatings	2(1/88)	10	40,000	0
Tech Evaluation	2(1/91)	2	60,000	0
Electrical Products	2(2/91)	5	36,000	?
Polymer Products	2(1/91)	20	468,000	0
Electronic Controls	3(3/91)	9	240,000	0
Other Services	1(2/91)	3	20,400	0
Business Assistance	3(11/90)	6	84,000	0
LNG Technology	3(8/91)	1	10,000	0
Display Systems	1(6/91)	3	30,000	0
Systems Development	1(6/92)	3	12,000	?
Clothing	2(5/92)	12	50,400	?
Indexing Solutions	1(5/92)	3	68,400	0
Circuit Board Repair	2(1/93)	2	30,600	0
Precision Machine	2(5/93)	2		0
Environment Research	2(11/93)	1		0
Data Transfer Systems	2(6/93)	2	60,000	0
TOTAL	30	84	989,800	0

Average				
Current Tenants Listed		Weekly	Range of	
By product/or Service	To Date	Earnings	Skill Level	Int'l
Polymer Coatings	75,000	76.92	semi-skilled	yes
Tech Evaluation	65,000	576.52	skilled	
Electrical Products	72,000	138.46	unskilled to semi	
Polymer Products	1,800,000	450.00	unskilled	yes
Electronic Controls	700,000	512.81	semi-skilled	yes
Other Services	32,400	130.77	semi-skilled	
Business Assistance	N/A	269.23	skilled	
LNG Technology	0	192.31	skilled	yes
Display Systems	200,000	192.31	semi-skilled	
Systems Development	40,000	76.92	semi-skilled	
Clothing	182,000	80.12	semi-skilled	
Indexing Solutions	104,000	438.46	semi-skilled	
Circuit Board Repair	40,000	294.23	semi-skilled	
Precision Machine			semi-skilled	
Environmental Research			skilled	

Data Transfer Systems	150,000	576.92	semi-skilled
TOTAL	3,296,600		

Table II
GRADUATES OF THE ADRON/SUMMIT INCUBATOR
1993

Graduates Tenants Listed By product/or service	No. of Employees *Beginning/Entry	Current/ Ext**	Current Payroll	Sales beginning
Defense Electronics	2(5/83)	33(6/84)	346,000	80,000
Quality Wood and Plastic Laminate Furniture	1(6/83)	8(5/85)	120,000	50,000
Computer Board Design	2(4/84)	10(2/87)	400,000	30,000
Electro Machanical Assembly	3(6/84)	65(10/89)	518,000	131,000
Medical Products	2(2/87)	15(10/90)	600,000	0
Sport & Orthopedic Supplies	2(10/83)	6(6/93)	23,000	2,000
Electric & Energy Contractor	12(9/83)	120(6/87)	4,000,000	380,000
Electrical Assembly	3(12/84)	28(10/88)	500,000	350,000
Communications	2(10/85)	2(12/89)	40,000	40,000
Office Services	1(7/83)	7(3/87)	150,000	60,000
Environmental Lab	1(11/84)	40(11/88)	1,500,000	230,000
Electronic Assembly	2(8/92)	4(7/93)	170,000	0
Subtotal - Graduates	30	338	8,327,000	1,353,000
Subtotal - Current Tenants	30	84	989,800	0
Total (current & graduates)	60	422	9,316,800	1,353,000

Graduates Tenanats Listed By product/or Service	To Date	Average Weekly Earnings	Range of Skill Level	Int'l
Defense Electronics	2,200,000	201.62	unskilled to semi	yes
Quality Wood & Plastic Laminate Furniture	600,000	288.46	semi-skilled	
Computer Board Design	2,000,000	769.23	skilled	yes
Electro Mechanical Assembly	2,250,000	91.71	unskilled	
Medical Products	2,500,000	769.23	skilled	yes
Sport & Orthopedic Supplies	58,000	176.27	unskilled	yes
Electric & Energy Contractor	12,000,000	641.01	semi-skilled	
Electrical Assembly	1,000,000	343.40	unskilled to semi	
Communications	200,000	384.62	unskilled	
Office Services	300,000	41.19	unskilled	

Environmental Lab	2,000,000	721.15	skilled
Electronic Assembly	412,000	817.31	semi to skilled

Subtotal - Graduates	25,517,000
Subtotal - Current Tenants	3,296,600
Total (current & graduates)	28,813,600

Table III
AKRON AREA BUSINESS PATTERNS

Gross Weekly Earnings	1993 Average
Manufacturing	558.89
Communication, Transportation, Utilities	694.09
Wholesale Trade	424.85
Retail Trade	240.09

SMALL BUSINESS ACCESS TO THE INFORMATION HIGHWAY: THE LOCAL SBI AND THE INTERNET

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William F. Krumske, Jr.
Gary Leinberger
Millersville University of Pennsylvania

ABSTRACT

The Small Business Institute located at a college or university with an Internet connection is ideally situated to become the local source for the information highway. In the process, the program and the college/university receive a real public relations boost, and the faculty involved find an endless source of research ideas and opportunities. Campus realities can make this a difficult service to set up, and like any new business venture, adequate capital is required.

INTRODUCTION

It is desirable and now possible for the business community to look to the local Small Business Institute as the first place to call for up-to-date, locally relevant business and economic information. The large business information centers (BIC's) currently established or soon to be established at only a handful of large cities are not useful as models in today's modern communication context. Electronic communication on the Internet makes it easy to access more data than is currently programmed at the official BIC centers. The importance of the Internet as a communications and business tool is a subject of considerable debate. Most agree, however, that access and an ability to work with this emerging technology is positive.

Some enthusiasts argue that the Internet and society as a whole is experiencing "digital convergence," which means that a lot more than virtual communities and libraries of text are going to live on the Net in the near future. "Cyberspace is where your money is." The value gained now by knowing how to move these abstract money messages around the world's telecommunications networks dwarfs the original value of the goods and services that produced the money. (Rheingold, p 75)

The Small Business Institute can be positioned as the information source for the local business community. This paper suggests a way to create an access/ help service which addresses the needs of the small business person and allows the SBI to provide these services to the local business community. Such a program requires an Internet domain, "Call-in" capacity equal to the expected volume, and a Small Business Institute director with an inclination to work on the "Information Highway."

The SBI'S, nationwide, can cooperate in the development of information to be shared by all SBI'S, clients, and small businesses. Once this program is operational in one SBI nationwide, it will be easy to make it available at all five hundred sites (even at those without Internet). The benefits to any participating SBI program include local and national prestige and funding, academic credibility for the SBI director and other co-opted faculty. The business information center at the local SBI will attract attention to the university, and then to the faculty associated with the information source. Faculty will receive the benefit of added exposure, increased contact with the businesses in the area, and may benefit directly as consulting opportunities arise. Students will benefit because of the importance of electronic research. Students can work directly for the center or as consultants on projects, in the context of the SBI course, or others. Facility, and familiarity with networking skills are likely to be necessities as more businesses get on the information highway.

For SBI's without Internet connections the program can participate by telephone linkage to other institutes that can offer the connections.

ESTABLISHING A LOCAL
INTERNET PRESENCE

The immediate benefit of setting up an Internet connection is excellent local public relations. Consider the advantage of having a start-up screen like figure 1 appear on local business computers every morning: (graphics omitted)

MU BIZLINE

YOUR BUSINESS INFORMATION SOURCE
SMALL BUSINESS INSTITUTE

MILLERSVILLE UNIVERSITY
MILLERSVILLE, PA.

J. DOUGLAS FRAZER, DIRECTOR
WILLIAM F. KRUMSKE
GARY LEINBERGER
717-872-3574 PHONE
717-871-2003 FAX
717-871-#### ON-LINE
===

Special screens can be added to make announcements for other SBI programs, or even to solicit clients for cases:

Figure 2
Announcements
MU BIZLINE

Small Business Institute
Millersville University
Millersville, PA 17551
717-872-3574

```
**********************************************
* The SBI Announces the Fall Seminar Series:  *
* September 20 - Hiring Pitfalls             *
* October 21 - ADA and Interviews            *
* November 20 - Retirement Plans             *
* Register by E-Mail, Or call                *
* us at 717-872-3574                         *
**********************************************
```

There are numerous ways to get access to the Internet. For example, colleges and Universities (.edu) and many other non-profit organizations (.org), government (.gov) and commercial (.com) already participate in the Internet. If the local SBI is on a campus with such a connection, it has the potential for providing such access to the local business community under its own auspices. If it does not have such a connection it would be possible to set up the service in cooperation with any of the other Internet sites in their local area.

Services provided via the Internet are:
Gopher- a menu driven protocol that makes Internet navigation simpler.
Telnet- a computer protocol that allows a user to log on to a remote computer.
FTP- a computer utility that provides "File transfer protocol' making it easier to transfer files.
E-Mail- electronic mail- not just good for sending messages, but can also send files.
Web- Hypertext interface, for those who like a subject oriented search.
WAIS- Databases and indexes.
BBS- Electronic bulletin boards where messages and useful stuff is posted. (PC-Computing, 9/94)

Providing access, in the form of some or all of the above, to the small business person is by itself a business opportunity. The small business person presently can purchase access from one of the following on-line services. Most do not do a good job of providing Internet access, and there is a cost for using such services: (The following summaries were provided in the September 94 issue of PC Computing, P. 140):

Compuserve

Provides E-Mail access only and costs $8.95/month for unlimited use of "basic services." Compuserve's other services are quite expensive. It has its own very active bulletin boards and discussion groups which may be useful, but they are not the Internet.

America On-Line

Provides complete Internet access for a cost of $9.95/month for 5 hours. Help is not always enough, and no research assistance is available.

Prodigy

E-Mail only. Maintains its own bulletin board and like Compuserve is not the Internet. Cost is $14.95/month for 30 messages and 2 hours.

Delphi Internet Services

Complete Internet access for $10/month for 4 hours, $20/month for 20 hours. Help is not always enough, and no research assistance is available.

People are paying these on-line services for access and that is all they get. The advantage of an SBI program that provides access is the possibility of significant additional services such as research assistance and other information consulting. The Internet provides a vehicle for seemingly unlimited information consulting offered by the SBI as well as a wealth of projects for students and faculty.

WHAT SERVICES TO OFFER

Dial-up access is the first and essential service. The going rate is approximately $10/month. Assuming 500 accounts, the program would have a budget of $60,000 per year. Access is just the beginning, because AOL and Delphi offer Internet access. A program run by the SBI should take advantage of its university setting and provide research assistance far beyond any help offered by the commercial on-line services.

The Internet is confusing and the local SBI can provide real service by simply organizing a bulletin board and making it possible for users to ask for help.

There are plenty of bulletin boards already, but none are designed for the local business community. Material organized around local concerns and business interests would be extremely helpful. Also, a locally operated bulletin board can be more responsive to individual requests for information, adding to the effectiveness of the system.

Millersville University's Bizline is only in the design stages at this time.
The lead gopher screen will look something like this:

Figure 3

Lead Gopher Screen

MI BIZLINE
Small Business Institute
Millersville University
Millersville, PA 17551

1>> MU-News
2>> Small Business Institute Programs
3>> Business Information
4>> Government Information
5>> Lancaster Chamber of Commerce
6>> Local Announcements
7>> Pennsylvania Information
8>> Internet Resources and Searches
9>> Research Assistance

Q to quit, U to go back one menu, or # of choice

The power in a gopher system is the accessible material. A wealth of information is available. Information likely to be helpful could include:

- Business
  - Stocks and Market Access
  - Maps
  - Periodical Indexes
  - Better business bureau
  - Credit bureau
  - On-line shopping/quotes
  - Jobs- both employer and Employee postings
  - On-line financial services
    - Banking
    - Insurance
    - Interest rates
    - Investments
  - Local Economic data
  - Time-Series Data
  - Travel Agencies
  - Newspapers

- Software
- Barter Center

Library-Most libraries everywhere

Chamber of Commerce

- Member lists
- Programs

Government Resources

- SBA-Online
- FEDWORLD
- Dept. of Commerce
- State Department
- Trade Opportunity Program
- Federal Register
- Census Data
- US Budget
- County/Township
  - Building regulations
  - Zoning
- "Doing Business In"
- International Trade
  - Doing Business In
  - Economy Studies
  - Export Information

RESEARCH ASSISTANCE

Providing research assistance is the real difference between the traditional on-line services and the service envisioned here. With the resources of a college or university including faculty, students and computer resource professionals, the Small Business Institute can be very useful on the information highway. Assistance may take the form of completed research or just directions.

Some clients may be interested in completed research reports generated by the institute staff. The client makes their request known through an E-Mail message or a phone call. The report is then delivered via E-Mail or hard-copy, or both. In some ways, the hard-copy report is preferred because it gives the institute a chance to format and present a report which is superior to what may be possible electronically. A hard copy also creates the opportunity of some secondary readers picking up the report and inquiring about the service. Such positive public relations is useful, and profitable.

The Internet is very complicated an some clients may just need to ask directions. Stopping and asking directions is made possible with a "chat" mode during normal business hours, or when a consultant can be on duty, with a frequently asked questions (FAQ) file, or with an E-Mail facility for other questions.

HOW TO OFFER THE SERVICE

The SBI bulletin board and gopher server can be accessed in at least two ways. The campus may make the SBI server available through its regular dialing access lines. See Figure 4(omitted). The choice of the SBI network is made at the login point. The campus could maintain many special purpose networks, the SBI being only one. Many campuses maintain special purpose bulletin boards, such as: performing arts, course information, sports scheduling, library services, etc.

The major advantage of using the existing dialing facility is cost and staffing. The campus has already invested resources, both people and hardware in this service. The SBI program does not need to concern itself with any of the operational details beyond the material on the bulletin board.

The major disadvantage of using the existing facility is the number of access lines, a particular problem considering student and faculty use. It would not be acceptable to charge for service and then for the client to get busy signals at all hours. In addition, if the overall net goes down for any reason, the SBI clients would lose their service.

An alternative to using the existing network is to purchase an independent system. In Figure 5 the SBI Bulletin Board is housed in a computer owned by the SBI and is accessed through phone lines and access hardware owned by the SBI.

Such a solution resolves the problem of access priority, but increases the workload on the SBI staff. Not only does the system have to be purchased (easily $16,000), but it also has to be maintained and serviced.

APPROVAL OF A BULLETIN BOARD SYSTEM

Each campus has a different bureaucracy for the approval of a system with such public relations potential, monetary impacts, faculty loads concerns and computer resource demands.

Another decision that needs to be made is whether to provide direct access to the Internet to all clients. An alternative would be to provide a bulletin board with a research help service. Such a reduced solution should be considered because it affects costs, and will determine the extent of ampus oversight. On many campuses a bureaucracy has been set up to supervise the use of the Internet. By offering only limited access and research help the director may be spared some of the oversight issues. At the same time, however, such a limited solution would be less marketable to the small business person. Such individuals feel that they need direct access, but more than likely will be swamped with the reality.

If direct access is provided the SBI director must consider the academic and computer administrations and probably the development office because of the significant monetary potential. The financial officer must be involved because of the necessity for customer and service contracts. Finally, some campuses will not be able to come to terms with fee for service in the area of research.

THE COST

A small bulletin board with 24 access lines, as in figure 5 (in which the system is owned by the SBI omitted) the costs would run in the neighborhood of $16,000.

A Silicon Graphics Workstation or equivalently powerful computer should be obtained in preference to a 486 or Pentium machine.

S.G. workstation-	$8,000
Concentrator-	2,400
Hookup Costs-	1,000
Phone lines (per year)	2,880
Software (approx)	2,000
Graduate Assistants	?
Total (at least)	$16,280

CONCLUSIONS AND RECOMMENDATIONS

If the SBI director is inclined and funding and bureaucratic hurdles can be overcome the Internet is an excellent way to expand services to the local small business community. The benefits would also include a wealth of projects for faculty and students. The ability to do research with this new tool is an educational goal for both faculty and students. Further, the research questions which come to the center in the normal course of its operations will provide many interesting and potentially publishable results.

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UTILIZING ELECTRONIC INFORMATION RETRIEVAL TECHNIQUES FOR ASSESSING GLOBAL MARKET OPPORTUNITIES: AN EVALUATION OF THE NATIONAL TRADE DATA BANK ON CD-ROM AND ONLINE THROUGH INTERNET

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ABSTRACT

Successful international business executives thrive on timely information. It is very important, therefore, that SBI/SBDC counselors be able to gather foreign market information and apply it to decision making for small- and medium-sized businesses interested in entering international markets. Obtaining the necessary factual and interpretative information to achieve a thorough understanding of another environment may require a significant amount of time, resources, and expertise. Given the scarcity of such resources in many small- and medium-sized businesses, this paper discusses an efficient and effective way to gather data on this scale, the use of a program containing a database of international information - the National Trade Data Bank which can be accessed through electronic retrieval on a CD-ROM and online retrieval through Internet. Using the NTDB and either electronic retrieval techniques in the SBI/SBDC programs can be an effective tool to facilitate the counseling process.

INTRODUCTION

It has been acknowledged by government, business and academia that U.S. companies have underperformed in the international realm relative to the European and Asian counterparts. According to the U.S. Department of Commerce, only about 15% of all U.S. manufacturers export. Kefalas (1988) states that a major cause for this sub-par performance is a lack of knowledge on the part of many U.S. businesses about the exporting process. Weber (1991), also argues that college and university curricula are inadequate in addressing international business issues.

Surprisingly, this sub-par performance exits despite the extensive efforts of many groups, both government and the private sector, to promote exporting. For example, such sources include the U.S government's Trade Information Center, the nearest district office of the Department of Commerce's International Trade Administration, industry specialists who are available for expert counseling, state governments are a prime source of assistance, industry trade associations are also useful, as are private consulting firms and the business departments within major universities (see US Department of Commerce (1992). Business America).

Yet, very little of this knowledge is available in an "actionable" form to help managers prepare for the country of entry. Also, the typical small- or medium-sized business does not have the resources of a large multinational corporation at its disposal to gather relevant information. For example, a personal visit with an executive or other leading member of a trade association in the country of interest may be initiated to obtain information on the demand for a particular product and obtain first hand knowledge as to the culture of the country (Axtell 1989). The small- and medium-sized entrepreneur, however, may not have the capital for such a visit.

Despite the difficulty of obtaining the variety of appropriate information for the small business interested in international operations, some means must be found for organizing intelligence that most vitally affect the firm. Part of the problem has been the inability to effectively package and distribute to potential users the tremendous volume of information on the exporting process maintained by the various sources. Perhaps a workable approach to aid entrepreneurs is to consolidate knowledge and expertise on the demographic, political, economic, the customs, laws, or ways of conducting business in a particular foreign country, as well as market entry conditions and information on the market structure.

Aided by the increased availability and acceptance of microcomputers, the federal government has recently introduced a program, the National Trade Data Bank (NTDB), on electronic retrieval. This program utilizing electronic data retrieval technology provides timely access to vast amounts of information more efficiently than physical searches in corresponding printed references. For assessing foreign market opportunities the advantages are even more pronounced, as print versions of the relevant databases may not exist or become outdated in a short span of time, the journals indexed may be hard to find, and original articles may be published in several different languages. Electronic data retrieval may also serve as the most cost effective mode of information transfer to support research activities. The following section discusses the many facets of the National Trade Data Bank and will serve as a guide to potential users. After that, an assessment on the merits of accessing the NTDB via CD-ROM and Online retrieval using Internet will be made.

THE NATIONAL TRADE DATA BANK (NTDB)

The CD-ROM edition of the NTDB provided by the Department of Commerce contains over 300,000 documents of current international trade and economic data from 20 federal government agencies, including the CIA, Federal Reserve System, Ex-Im Bank, Overseas Investment Corporation, several branches of the Department of Commerce, and more. The program addresses all stages of the exporting process, with outstanding coverage of references and resources available to assist in the process. The stated objective of the NTDB is to provide reasonable public access, including electronic access, to federal government data of the greatest interest to U.S. firms that are engaged in export-related activities (Cremeans 1991, Plant 1991). The NTDB's development was mandated by the enactment of legislation in 1988 that directed the Department of Commerce to centralize the government's extensive trade and export promotion information resources housed in 15 (at that time) separate agencies. The program is currently available at nearly 700 local libraries across the U.S. and is available free to any Federal Depository library. The entire program is updated on two disks each month and may be purchased as a monthly subscription ($360 per year for 12 monthly upgrades per year) or on a one-time basis ($ 35 for the two disk set) from the U. S. Department of Commerce (See US Department of Commerce (1994, May). National Trade Data Bank). Program Features:

The program is essentially a search and retrieval system for the extensive information maintained in the NTDB. It offers the user a choice of two search and retrieval features: 'BROWSE,' which is intended for users with basic computer skills and no specific knowledge of federal data; and 'ROMWARE,' a more complicated menu program that permits multiple search items, four Boolean operators (AND, OR, NOT, XOR) and numerous combinations of grouped search items. Most searches are relatively fast, using only several seconds to generate lists of dozens of documents. Both retrieval methods search the NTDB database based on country, product, or topic criteria. This paper focuses on the BROWSE feature, a series of pyramid menu structures offering five different choices to access the database: Source, Topic, Program, Subject and Item. Selecting 'Source' produces a detailed list of the agencies contributing to the NTDB and serves as a gateway to a more detailed sub-menu of program names produced by each agency. 'Topic' enables access by general topic or category. A menu lists all the general topics from which you may select the appropriate topic. The 'Program' option allows you to begin your search by specific program name, from which you select from a list of all programs contained in the NTDB. The 'Subject' option allows a search by using words contained in every document title regardless of source agency, program, or topic, such as product or country. The 'Item' option allows you to search the database by specific document identification codes.

The NTDB also includes a comprehensive, 100 page guide to exporting entitled "A Guide to Exporting", as well as most resources published or maintained by the federal government on exporting. Included are such features as the U.S. Industrial Outlook; the World Factbook published by the Central Intelligence Agency detailing political, economic and cultural issues by country; Market Research Reports, which includes Country Marketing Plans, Industry Sector Analyses and Foreign Economic Trends; Business America, Commerce's bi-weekly publication that is designed to help American companies sell overseas; Trade Opportunity Program which indicates sales opportunities and leads from U.S. embassies abroad; and the Foreign Traders Index, which identifies over 50,000 foreign firms active or interested in importing U.S. products. The Foreign Traders Index also includes a description of each prospective importer by country and by product(s) desired, how long it has been in business, and the number of employees.

A key strength of the NTDB is the large volume of relevant, accessible trade and economic information housed in the program. As noted in the introduction of this paper, one of the gaps in the international arena has been the inability to effectively package and distribute to potential users the tremendous volume of information on the exporting process maintained by the various sources. The NTDB addresses this problem in a surprisingly effective way.

ELECTRONIC DATA RETRIEVAL TECHNOLOGIES

Accessing the NTDB on CD-ROM

As a inexpensive way to distribute mass amounts of information, CD-ROM's can't be beat (For a general background on CD-ROM technology see Riofrio 1993, Quain 1992, Raskin 1992, Smith 1992). These disks can hold around 650 megabytes of information, and NTDB has stored over 2,000 disks on their CD-ROM set.

To retrieve programs from the CD-ROM you will need a CD-ROM drive. CD-ROM drives are like audio compact disc players with additional circuitry that detects and corrects transmission errors. They also require hardware and software to connect the drive to a PC. The NTDB is especially appropriate for colleges and universities, many of which already have CD-ROM readers, for use in a broad number of curricula applications. Indeed, 56.8% of academic libraries in the U.S. have CD-ROM capability (Chen and Raitt, 1990), therefore, many students may already be familiar with this technology. However, many small and possibly medium-sized academic institutions may not have access tothis technology. Threfore, if your library does not have access to a CD-ROM reader, we have found that you can spend as little as $200 for a drive or shell out as much as $1,500. The cost depends on whether the drive is internal, external, or portable; how fast it is; and whether the controller card is included. At our institution, even though our library has a CD-ROM reader, we opted to purchase one for our SBI program. In our search for a CD-ROM drive we opted for a portable one so that we can take it on the road during visits to our clients and presentations to various groups. We chose the SyDOS Personal CD by SyQuest Technology at a cost of $270.

The reasons we selected this model were its highperformance parallel port interface which eliminates the need for a costly controller and allows you to hook onto any parallel port. Since we use notebooks and laptops in our field work we needed a drive that was really portable. We found this model so compact and light weight that we could carry it with us to clients and community presentations with ease. And, since notebooks and laptops do not have built-in slots, the high performance parallel port on this drive was a perfect accompaniment. And since the SyDOS Personal CD comes with a built-in 'pass-thru' printer port, we did not lose our printer capability. And finally, we wanted something that was easy to install. Since the drive is external and hooks up to the parallel port, there were no complicated cards to install or jumper switches to set. In fact, it literally hooks up to any PC in seconds.

Once you have selected a CD-ROM drive you must consider how data are retrieved from the disk; therefore, retrieval software is required. The NTDB distributes their retrieval software on the CD-ROM. As described in the preceding section, it is easy to use.

Accessing the NTDB on the Internet:

With online data retrieval, a local computer accesses data stored in larger systems in off-site locations. For current microcomputer users, equipment costs are limited to a modem and the software to run it. At present, less than $150 amply meets this need and includes 14,400 baud send/receive fax capability as well. To access the NTDB your college of university will have to have access to Internet. Internet is a collection of thousands of computer networks, tens of thousands of computers, and more than 20 million users who share a compatible means for interacting with one another to exchange digital data. If your institution does not support Internet, the cost for an individual connection will come from three sources: service provider charges, line connection charges, and set-up cost. We already discussed set-up costs. Service provider (for example, CompuServe, America Online, and Delphi) charges dependon the level of service you obtain and the price structure of the provider. You can expect to pay from $10 to $30 per month for basic service. Under some conditions you can even obtain a free connection (see Levine and Baroudi, 1993, 311-314). You'll also want to figure in the charges from your phone company for connection time charges, if applicable. A popular trend among service providers is to offer an 800-number-based service. Online data retrieval has several advantages over CD-ROM technology. First, users have access to several hundred databases without incurring the incremental charge of purchasing each one. Also, these databases are constantly updated on a regular basis and available instantaneously to the user.

On June 15, 1994, the Commerce Department took a major step forward in fulfilling its goal of creating a comprehensive Business and Economic Node on the Internet. Guided by the mandate set out by Vice President Gore's National Performance Review and by the National Information Infrastructure Agenda (Levine and Baroudi, 1993, 14), the Department made available to the public through the Internet the National Trade Data Bank. The NTDB will be available in three Internet applications. These applications are File Transfer Protocol, Gopher, and World Wide Web.

The File Transfer Protocol (FTP) will allow the user to access files directly from the source's computer, similar to a computer network file server. Gopher is a system designed to allow the user to have access to electronically distributed documents on-line: unlike FTP which views only file names, the user actually can view the text of the document during a Gopher session. The most exciting of the options, however, will be the World Wide Web application. This service will allow the user to not only transfer files as in either the Gopher or FTP applications, but will allow for the incorporation of audio and full-motion presentations with the existing text. It will also allow for full-text searches of the data, where Gopher allows only searches using file descriptions, and FTP allows only searches by file names. World Wide Web information is accessed using Mosaic, an application developed by the National Center for Supercomputing Applications (NCSA) at the University of Illinois, and is available at no cost to the user.

The Internet addresses for the NTDB on the Internet are:

FTP: ftp.stat-usa.gov
Gopher: gopher.stat-usa.gov
WWW: www.stat-usa.gov
or
LYNX www.stat-usa.gov

To obtain the NCSA Mosaic Software for Unix, Windows, or Macintosh:

FTP: ftp.ncsa.uiuc.edc

To obtain Gopher software:

FTP: boombox.micro.umn.edu

SUMMARY

The 1990s offer the small- and medium-sized business firm a global orientation opportunity. The world economic order is changing, and with changes, there are new opportunities. Many of these changes, including the cultural/operational aspects of a country must be monitored carefully. Small- and medium-sized businesses must understand the shifts in order to identify appropriate opportunities and to develop programs that take advantage of those opportunities. Constraints of time, resources, and expertise are the major inhibitors to successful international operations. Nevertheless, firms need to explore foreign market alternatives successfully.

In this paper, we have attempted to achieve a number of objectives. First, we tried to set out the problem of assessing foreign market opportunities. To be able to gain a competitive edge over their competitors, U.S. firms constantly need and search for data and information about markets they contemplate entry as well as the ones they are currently operating. It is very important, therefore, that our SBI/SBDC counselors be able to use the latest information retrieval techniques.

Secondly, one source, the NTDB, was reviewed as an effective and efficient resource for SBI/SBDC counseling for international cases. It provides more up-to-date information than is possible with physical searches in corresponding printed references.

Third, we attempted to provide an overview and to explore the possibilities of electronic data retrieval technology - CD-ROM and Internet - for accessing international trade and economic data from the NTDB in assessing foreign market opportunities. The traditional barriers of cost, inaccessibility, and difficulty of use are rapidly declining.

In short, the NTDB and the CD-ROM and Internet retrieval technologies are a unique combination of tools regarding information needs in foreign market evaluation. Using the NTDB and either electronic retrieval technology in the SBI/SBDC program can be an effective tool to facilitate the counseling process.

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RULE BASED SOFTWARE, THE SMALL BUSINESS TOOL FOR GAINING A COMPETITIVE ADVANTAGE WITH LITTLE RISK

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ABSTRACT

This paper presents specific steps that a small business manager can use to employ rule based technology to gain an advantage over his/her competitor. Three easy-to-understand small business examples are presented in which the technology is used for credit scoring, product marketing and credit collection. Rule based systems and their benefits are explained with very basic terminology in order to focus on the practical application of this technology for small business. Key concepts are presented via user-friendly examples and simplified theory, which hopefully reduces the anxiety of small business managers considering such information technology. Managerial recommendations are offered which provide a low cost, low risk approach to successfully developing rule based systems.

INTRODUCTION

An old Taoist proverb says that a thousand mile journey starts with one step. When it come to applying information technology to gain a competitive advantage however, many organizations, especially small ones, are reluctant to start the journey. They see the journey as being too long, i.e., not worth the time it takes to create the application. Or they are not sure which direction will lead to a success. The purpose of this paper is to knock down both of these barriers so the reader can embark on an exciting and rewarding journey. The sections following this Introduction will show that it is possible to create applications using information technology which provide a competitive advantage with little cost and risk.

If it sound too good to be true, you may be asking yourself, "Why isn't everyone doing it?" The answer is simple. When aspiring developers hear the words artificial intelligence and rule based software (also called expert systems) they immediately stop in their tracks; the journey is over before it begins. These two phrases strike fear in the heart of all but the most daring. If one is willing to venture into the world of rule based systems however, they will be amazed at the leverage these systems can provide. Our experience has shown that business students can and do learn to write rule based systems as part of an introductory class in management information systems. Many of these students advance beyond trivial projects to sophisticated projects before the end of the semester.

This paper is intended to be both a first step and a step in the right direction for those who want to try developing an application which will provide a competitive advantage. A little theory and a lot of application information is presented as a guide. Rule based systems may have an ominous sound, but they are a form of information technology that is easy to understand and use. The first section of this paper provides an overview of rule based systems. The second section briefly reviews the concepts of information technology and competitive advantage. This section also details some examples in which simple rule based systems can provide a small organization with a competitive advantage. The third section explains some key concepts of rule based systems programming. The fourth section presents criteria for getting started and selecting small business applications which are appropriate for rule based technology. The final section provides some specific action steps for those ready to jump on the bandwagon.

RULE BASED SYSTEMS - A BRIEF BACKGROUND

Rule based systems are a product of expert systems research in the field of artificial intelligence (AI). Rule based systems are a specific type of expert system that represent knowledge in the form of rules and statements of fact. They are the most common type of expert system because they relate facts and reasoning procedures in an intuitively familiar way, while AI is the broad field concerned with automating intelligent behavior (Luger & Stubblefield, 1 989). The object of an expert system is to capture the knowledge of an expert and automate the thought process of the expert in solving a particular set of problems. The expert's field, or area of expertise, is referred to as the domain of knowledge or more simply, the domain. These fancy words tend to intimidate the uninitiated, but they are part of the expert system jargon. A domain of knowledge can range from determining if you should take an umbrella to work to diagnosing bacterial infections of the blood. In fact these two examples are the frequent topics of expert system discussions.

The first expert system was developed at Stanford University in the mid 1970's (Luger & Stubblefield, 1989). MYCIN, as it is called, is able to diagnose bacterial infections of the blood and recommends treatment. This system is impressive in it's accuracy. Continued research in the field of expert systems led researchers to identify two parts of the MYCIN system. One part contained the facts and knowledge of the domain area (the area of expertise) and the other part contained the knowledge processing apparatus. The facts and knowledge are called the knowledge base and is analogous to a data base in a traditional information system. The processing apparatus is referred to as the shell or expert system shell.

The expert system shell contains all the facilities for processing the data in the knowledge base. The shell is like a Lotus spreadsheet program that has no data entered into it. As data is entered into a spreadsheet it can become a marketing planning tool. As facts and knowledge are entered in to the expert system shell it can become an "expert" in financial analysis. The spreadsheet is a useful tool to support decision making; the expert systems makes decisions.

When someone uses an expert system, they are said to be performing a consultation or consulting with the expert system. An expert system acquires facts from the user to process in a manner deemed appropriate by the expert whose knowledge is represented in the system. The knowledge from the expert is coded in the form of rules in a ruled based system. These rules are generally in an IF-THEN form. For instance, IF the sun is shining, THEN don't take an umbrella to work. An expert system with 20 to 30 rules is relatively small and can be created in a few days.

A number of software products, either in the form of expert systems or expert systems shells, are commercially available for personal computers. An expert system is a system capable of performing consultations in a particular domain of knowledge. In other words, it is a ready to go system with knowledge already in it. Some examples of expert systems can be found in the field of banking and finance (Friedman, 1986). PLANMAN is an expert system that performs financial planning. Although it runs on a personal computer, it has over 7,500 rules making it a rather large expert system. COURTIER, developed by Cognitive Systems Inc., advises users what stocks to buy. Another example is TRANSFORM which automates the development and management Of computer system applications.

An expert shell is a software product used to develop an expert system. Expert system shell products have names like VP-EXPERT, M.1, EXSYS, and EMYCIN. VP-EXPERT is widely used for college courses since a limited development version is included in a number of college textbooks. The price for getting started with VP-EXPERT (Luce, 1992) is less the $50. including a tutorial on the expert system shell.

Students at our institution are required, as part of a graduate management information system course, to learn and apply expert system technology to business problems for two reasons. First, expert systems are growing in popularity among larger corporations and can be shown to have significant impact in small organizations. Substantial benefits can be derived from small systems thereby enabling expert systems to provide a competitive advantage. Second, the development process is relatively easy compared to traditional programming languages. Students are exposed to "programming" without the frustrations of conventional programming. These two reasons are discussed in more detail in the following sections.

EXAMPLES OF COMPETITIVE ADVANTAGE FOR SMALL BUSINESS

A detailed discussion of competitive advantage using information technology (McFarlan, 1984; Porter, 1 985; Mattei, 1 994) is beyond the scope of this paper. A useful introduction on the topic can be gained from the following excerpts:
Information (IT) encompasses a broad range of products and services. Generally any given IT product or service can be classified as computer hardware, computer software or telecommunications (Mattei, 1994).

For an IT application to be considered strategic or provide a competitive advantage, it will affect competition in one of three ways identified by (Porter & Millar, 1 985):

1. It changes industry structure and, in so doing, alters the rules of competition.
2. It creates competitive advantage by giving companies new ways to outperform their rivals.
3. It spawns whole new businesses, often from within a company's existing operations.

The literature contains numerous references (McFarlan, 1984; Friedman, 1986; LaPlante, 1991; Herbert, 1993) of both small and large organizations developing and using expert systems. In many cases these systems are reported to achieve a significant competitive advantage for the organization. Unfortunately these references also leave the distinct, albeit incorrect impression, that using expert systems technology to achieve a competitive advantage requires a major organizational commitment and a significant expenditure of resources. While not as impressive as a large, complex expert system, it is possible to create a small, simple expert system that provides a competitive advantage.

The following three examples are projects created by students with less than a one semester exposure to expert systems as part of a course in management information systems. In other words, these students are not computer science majors with extensive training in the field of systems development. These examples were selected because they were created by and for small businesses, they were completed in a short period of time, have a recognizable competitive advantage, and they demonstrate some of the reasons for creating an expert system. Each expert system contains fewer that 30 rules making them small development efforts.

Credit Scoring: The first example was created by a student who works in the credit department of a small manufacturer. The credit department is a two person department, the credit analyst (a student that we'll call Mary) and an assistant. The credit analyst is spending so much time with numerous small value orders that she is not able to devote sufficient attention to the large value orders. In addition, she does not have enough time to train her assistant to assume some of the credit analysis responsibilities. Mary created an expert system in a few days that analyzes the credit worthiness of customers placing small value orders.

The expert system frees Mary to devote more time to the higher value orders. Some of the customers that Mary analyzes for credit worthiness require special attention for two reasons. First, the data available on the customer is retrieved from numerous sources and extensively analyzed. Second, most of the high value orders are of a magnitude that slow or non-payment would result in serious financial impact on the organization. Another benefit of the expert system is that it provides a training mechanism for her assistant. This further frees up time for Mary and allows the organization to use a lower-skilled employee to accomplish work previously performed by a higherskilled, higher-paid employee.

Collection Application: The second example was created for a small collection agency. The manager (a student that we'll call Tom) is responsible for a group of collection specialists. Tom has a unique problem, one specialist is too productive in collecting money for clients. Unfortunately, the specialist's productivity is gained at the expense of customer goodwill. Some customers complained to the client organization, who in turn directed Tom not to allow the specialist to act on their behalf. Tom created an expert system that incorporates collection techniques that are sensitive to the customer and achieves the highest level of collections. The major benefit to the agency is the consistency it provides among the specialists. In addition, due to the rather high turnover of employees, it is possible to achieve new employee proficiency in a shorter period of time.

Product Marketing: The third example was developed by two students for a small entrepreneurial firm that sells chemical spill containment and clean-up supplies. The firm was looking for something to differentiate it from numerous other suppliers of similar products. The expert system advises customers which product is the most effective from a cost and performance perspective to treat a particular spill. In gathering the facts for the consultation, the system is also able to produce reports for various government agencies. The system also contains a number of inconspicuous reference to the supplier of the software and the supplies.

The benefits of the system in this example are three fold. First, the customer perceives the supplier as committed to helping the customer use the products effectively. The supplier is not just interested in selling products. Second, the customer also perceives a benefit from the reduced clerical burden associated with reporting spills to the appropriate governmental agencies. Third, the supplier the achieves improved customer goodwill and name recognition. The supplier's name is on a number computer screens displayed as part of the consultation.

PROGRAMMING FOR NON-PROGRAMMERS

Another reason students are introduced to the development of expert systems is that they are relatively easy to create. Compared to traditional programming languages like COBOL and BASIC, expert system programming is more intuitive and English-like. This ease of use and development allows the student to spend more time applying the technology and less time trying to understand how to make it work.

There are two basic elements for incorporating knowledge into an expert system. The first element are facts like, it is cloudy today or it is freezing cold outside. These elements are coded as CLOUDS=YES and TEMPERATURE=25, respectively. In the first case the variable CLOUDS is assigned a value of YES, while the variable TEMPERATURE is assigned a value of 25 degrees.

The second basic element are rules. Rules specify the manner in which the facts are applied to create additional facts or knowledge. Rules generally take the following form:

IF CLOUDS = YES, THEN UMBRELLA = YES.

This rule creates the fact that an umbrella is necessary when it is cloudy outside. The above rule is intended to demonstrate the relative ease associated with creating the knowledge required in an expert system.

For VP-EXERT there are three major sections to the program. The first section is called the Action Block. This block begins the session with the user, typically by displaying information on the computer screen. In this section the programmer defines what facts or circumstances constitute the desired solution or outcome. This section is also used to report the advice or a final outcome to the user.

The second section of the program is called the Rules Block. In this block the rules are stated which define the ways in which the facts are to be applied. Generally there are rules to account for all the possible ways in which the various facts can be combined. Rules can be simple, as in the above example, or they can be quite elaborate, depending on the amount of knowledge that needs to be coded.

The third block is called the Statements Block. The purpose of this block is to gather data from the user as the expert system shell deems pertinent to the consultation in progress. In other words, the shell only gathers the facts necessary to reach a valid outcome. It does not gather the facts for all variables in the expert system.

The development of an expert systems by students has been a practical method for gaining an understanding of computers and computer programming without the in depth technical knowledge required of languages like COBOL and BASIC. Creating an expert system does however require the programmer to think through the project before the actual program is written. In addition, an expert system is no different from conventional programming in the need to carefully and fully test the operation of the program. If not properly designed and tested, an expert system can and will produce bogus and/or erroneous results.

WHAT TYPE OF APPLICATION IS MOST APPROPRIATE?

The best way to get started with expert systems is to select a trivial problem in an elementary domain. Examples of such an expert system are ones that advises the user whether to take an umbrella to work or one which decides which color shoes to wear with a particular outfit. These examples may seem like trying to kill a fly with a sledge hammer, but the purpose is to get started and gain confidence in creating an expert system. Once a person is convinced s/he can create a functioning system, s/he will feel prepared to turn to a more challenging project.

Creating an expert system requires three essential ingredients. The first ingredient is technology resources in the form of a computer, an expert system shell and a programmer (also referred to as a knowledge engineer). Next, an expert who is willing to share his/her knowledge with the knowledge engineer. Some experts are reluctant to share their knowledge since they may feel this diminishes the value of their knowledge. Third, an application that is suitable for expert system technology and has the potential of providing a competitive advantage. The first two have been discussed or need no further explanation. The third ingredient however, requires careful thought.

In selecting an appropriate application, one begins by identifying ways in which the organization can meet one of Porter's three criteria (Porter, 1 985). What activities are currently performed or what can the organization do that will affect competitive forces within your industry? This soul searching is not easy, but should be performed as part of a strategic planning process, even if technology is not to be applied. If a particular small business is not embarking on the creation of a competitive advantage, his/her competitor might be.

Once a set of possible applications has been identified, the next step is to evaluate each application in light of the following questions:

1 .Would the application be more quickly developed using a different form of technology? Some developers become enamored with the technology and do not critically assess the best approach to solve a problem. Some projects might be better implemented using a spreadsheet package or data base management system. For example a program that calculates the monthly repayment on a loan is a relatively simple task with a spreadsheet package. A system that advise someone whether to refinance their home is better suited to an expert system. A refinancing application would require data on current loan payments, total life of the loan, years remaining on the loan, current interest rates, expected number of years to remain in the residence and anticipated closing costs. Interestingly, a group of students created such an expert system with less than 30 rules. The class unanimously agreed that the application could have a considerable competitive impact if implemented by a either a small or large bank in the community. Unfortunately, one bank approached by the students declined to experiment with the system.

2. Is the knowledge to be automated relatively constant or does it change frequently over time?The less that the knowledge/process changes over time the better. If the rules will require continual updating and/or expansion, then the application does NOT lend itself to automation as an expert system, especially for a small organization. The above loan refinancing example does not require a lot of updating or modification over time. In a different project, a group of students learned the hard way that an expert system which advises computer users on the cause of printer error messages is NOT a good candidate for an expert system. The number of printers is large and they are constantly being replaced by newer models.

3 Can the application start small and evolve over time into a larger system as required? The Loan Refinancing systems is a good example of this condition. The students started with a basic system that provided fast and useful advice to the customer. As part of the project they identified enhancements that significantly broadened the scope of the system. With a little additional data from the customer, they were able to envision a module that would prepare a preliminary loan application for those customers identified as suitable for loan refinancing. The benefits of the project are to free up the loan originators to devote more time to loan processing and allow a clerical person to pre-screen potential bank clients. The preliminary application further frees up the expert to concentrate on high value bank activities.

4. Does the application provide value to the organization? Some of the more commonly valued results are to provide:

* Unbiased and consistent customer service.

* A backup for a key employee/expert in the event they are absent or quit.

* Provide a training tool for employees.
* A reduction in mundane or lower level tasks for an expert employee.

* Consistent advice based upon established organizational policies/procedures.

In any event, avoid the temptation to create an expert system because it is new or it might impress someone. If you want/need to showcase the technology, buy an existing expert system; don't develop your own.

5. Can the expert explain the wav in which he/she reaches a conclusion? Some experts are willing to be involved in the creation of an expert system, but have difficulty articulating their thought processes. This type of situation is best avoided until after you have a few successful systems in place.

CONCLUSIONS

Getting started is easy. Since high levels of computer expertise are not required, find a student or small business consultant who has basic computer skills and the desire to grow. The student or consultant obviously needs the essential interpersonal skill required to work with SBI client.

The next step is to select an inexpensive expert systems development package. VP-EXPERT (Luce, 1992) is a good choice, but there are a number of inexpensive, easy to use packages available for both IBM and Macintosh environments.

Last, but not least, select a simple pilot project with a cooperative expert. Choose a daily/routine task as described in this paper; it doesn't need to be one that provides competitive advantage. Heed the practical advice of the KISS principle, Keep It Simple, Stupid. Start off slowly with a simple project to guarantee a first time success. The initial success will provide the enthusiasm and interest to tackle more complex business situations. With a little experience and confidence, you and the client will be ready to tackle the challenge of developing an application that can provide a competitive advantage using low cost, low risk information technology.

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TWO SMALL BUSINESS STRATEGY OPPORTUNITIES CREATED BY CORPORATE DOWNSIZING: OUTSOURCING AND STRATEGIC ALLIANCES

ABSTRACT

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Corporate downsizing has been a highly publicized phenomenon in our economy in recent years, as many of America's largest and best known business firms have retrenched in a variety of ways. These downsizings offer strategic opportunities to those small businesses which have the enterprise and creativity to fill the vacuums generated, and this paper outlines two interrelated strategies for small businesses: outsourcing and strategic alliances.

INTRODUCTION

According to a recent American Management Association study, 47% of large firms surveyed reported workforce reductions and other forms of downsizing in the twelve months ending June 1993. Similar figures were reported in the previous two years. The average workforce reduction was 10.4%, and 45% of the downsized companies reported an increase in operating profits. Furthermore, 65% of companies that downsize in a given year do so again in the following year (Filipowski, 1993; Greenberg, 1993; Szwergold, 1993).

While the same tough economic climate, rising costs, and severe competitive pressures that have forced large companies to downsize have also faced small businesses, downsizing is less of an option for a firm that is already small (Touby, 1993). Other more creative strategies are required.

In particular, two such strategies can capitalize on the downsizing activities of large firms. These two small business strategies, which are interrelated, are outsourcing and strategic alliances. This paper provides an introductory discussion of these strategies , along with references to recently published articles, which hopefully will lead the reader to further thinking and research on this topic, so that he or she can thus be able to successfully implement appropriate strategies in his/her own or client company.

OUTSOURCING

"Outsourcing" means that a firm chooses to concentrate its activities in its core business, and then takes advantage of the expertise of other firms which are more efficient at specialized tasks that are peripheral to that core business (Kaufman, 1993). By farming out such tasks as word processing, payroll, security, travel, legal, accounting, janitorial and cafeteria services, corporations can save money and time and can pay more attention to their core activities (Bohner, 1994). Various studies indicate that outsourcing is increasing among larger American companies, and that those which do outsource grow faster and are more profitable (Industrial Engineering, 1994; Small Business Reports, Jan. 1994). Other studies show that focusing on core activities improves: 1. time to market, 2. competitiveness, 3. the firm's financial position, 4. operating efficiencies, and 5. management effectiveness; and also: 6. makes use of the best expertise, 7. accesses leadingedge technologies, and 8. reduces risk (Carr, 1993; McCune, 1993). More academic and theoretical analyses of outsourcing have also been presented; for example a model of internal vs. stable subtypes of interorganizational networking (Yarnell, 1993).

From a more practical point of view, various writers have developed lists of guidelines for companies considering outsourcing so that they can avoid the strategy's potential dangers (Evans, 1994; Lewis, 1992). For example, an outsourcing company should: 1. reward excellent performance, 2. be clear in the contract about exactly who is responsible for what, 3. agree in advance on exactly what constitutes success, 4. establish who pays if something goes wrong, 5. make clear who owns the rights to new ideas or technologies, and 6. stipulate the procedures for modifying or terminating the relationship.

Strategic opportunities for small businesses lie in this new outsourcing market. As large corporations farm out peripheral activities, small firms must grab the chance to be the supplier of such activities. This requires monitoring to identify corporate outsourcing decisions before or as they arise, and promotional efforts to convince the outsourcing firms that their exact requirements can be met. Thus potential small business vendors must understand the reasons why large firms outsource and the guidelines which they follow in selecting vendors. Knowing the potential advantages and disadvantages of outsourcing to the downsizing company can allow the prospective vendor to create a sales presentation that will anticipate the company's concerns and thus result in a contract. For example, a vendor sales presentation may include offering penalties for late delivery in return for rewards for early delivery. Or a vendor may recognize that the downsizing company is concerned about the morale impact created by layoffs and may offer to hire some excessed workers from the outsourced department in return for a contract of Sufficient size and duration.

Vendors might even contact corporations which have not yet made the decision to outsource, and sell them on the specific advantages of doing so. Many more examples can be given, but the point is that small businesses can best benefit from corporate downsizing if their owners, managers and consultants fully understand all of the facets of the downsizing/outsourcing phenomenon.

STRATEGIC ALLIANCES

The term "strategic alliance" refers to any formal cooperative venture between two business firms. Strategic alliances include joint ventures, lincensing, franchising, and other marketing, vending and research arrangements (Devlin, 1989). Thus, outsourcing is one type of strategic alliance. In the small business strategy context of this paper, however, we are primarily concerned with the concept of one small firm joining in some manner with another firm to accomplish something which it can not accomplish on its own; and more specifically the objective should be to fill a vacuum created by a large corporation's downsizing.

Two types of opportunities created by corporate downsizing lend themselves to small business strategic alliances: outsourcing vending opportunities as discussed in the first half of this paper, and market niches vacated by downsizing corporations which have decided that such niches are peripheral to their primary markets. In both cases, strategic alliances are appropriate when the small firm is too small to meet the opportunity alone-when the outsourcing contract would be too big or complex for the firm or when the vacated market niche can only be conquered by a seller larger or with broader strengths than the small firm. In either case, a strategic alliance between the small firm and another firm (small or large, but usually also small) would be necessary for success. For example, a small firm might form a strategic alliance with one or more similar firms in other geographic areas to provide janitorial services to the various branches of a large company that is outsourcing this activity. Or a small advertising agency might join with a public relations firm so as to offer a full range of promotional services to a corporation wishing to outsource this operation. Still another example would be two small electronics firms with different strengths joining together to develop a product to serve a market niche vacated by a large corporation.

Here, too, data suggests that strategic alliances make economic sense. One large scale study showed that firms which formed strategic alliances grew 20% faster than other companies, and had 11% higher average sales volume (Small Business Reports, Aug. 1993).

As is the case for outsourcing, many writers have developed guidelines for maximizing the benefits of strategic alliances, and point out that failed strategic alliances can be very costly. Critical steps in creating a successful strategic alliance are: 1. strategy development, 2. partner assessment, 3. contract negotiation and 4. implementation. Ground rules include: 1. realistically assess the business' prospects with and without the alliance, and 2. make sure the alliance provides true incremental value added based on two strong partners getting stronger (Bluestein, 1994; Rigby, 1994). Several experts suggest that the formation of a strategic alliance should involve several stages which build up the alliance gradually (Forrest, 1992; Lewis, 1992; Slowinski, 1992).

Academic theory can also be applied to this phenomenon. One writer has focused on social control in dyadic relationships (Larson, 1992), while another has analyzed strategic alliances in terms of game theory (Parkhe, 1993). But, as with outsourcing, it is the practitioner-oriented literature which is most useful to the small business owner, manager and consultant.

The small business contemplating a strategic alliance must understand the pros and cons. Alliances can collapse the period needed to get a product to market, cut development costs, and generally enhance competitive position with customers (Gibson, 1993). Costs can be trimmed, values can be increased, and research and development functions of allied companies can complement each other, filling voids that would weaken one company alone (Peterson, 1993). Strategic alliances can fill gaps in the current market and technology bases, turn excess manufacturing capacity into profits, reduce risk and entry costs into new markets, accelerate new product introductions, overcome legal and trade barriers, extend the scope of existing operations, cut exit costs when divesting operations, and produce economies of scale (Flanagan, 1993).

On the negative side, strategic alliances can threaten autonomy, confidentiality, reputation, and other business assets if the alliance does not work well or fails; thus the alliance contract must include provisions for evaluation and control mechanisms to serve the best interests of each partner (Dent, 1990). For an alliance to work, the following conditions for success must be present: 1. mutual objectives, 2. complementary needs, and 3. shared risks (Lewis, 1992).

CONCLUSIONS

Corporate downsizing is a major phenomenon in the current economy, and this pattern is expected to continue for at least several more years. As this downsizing presents some significant new strategic opportunities for small businesses, this paper has presented a general discussion of two interrelated opportunities: 1. as downsizing corporations outsource peripheral activities, small businesses can provide these activities to the corporations; and 2. as corporations abandon marginal market niches, small businesses can move into these niches.

Textbooks can be written about each of these two strategies. Thus a conference proceedings paper of this nature can only provide a starting point for the small business owner, manager or consultant who wishes to pursue these ideas further. This introductory discussion of the various facets, considerations, potential advantages and disadvantages, and guidelines relating to outsourcing and strategic alliances, along with the quite current listing of primarily practioner-oriented references, should allow the interested reader to evaluate the potential of either or both of these strategies for a specific small business, and then develop and implement a specific strategy for that business. Not every small business or its managers have the strengths and initiative to fill a void that has been vacated by a large corporation, but some small businesses can accomplish this, and the sales and profits opportunities can be substantial.

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SMALL BUSINESS MANAGEMENT: DO PROFESSIONAL MANAGEMENT PRINCIPLES APPLY?

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ABSTRACT

Small business failures have been attributed to failures in management. Such failures may result from a lack of understanding of "management principles." This article explores the understanding of "management principles" among two groups of small business managers. Based on the results of this limited study, small business managers do not understand or manage their business according to traditional management principles.

INTRODUCTION

Failures among small businesses are typically attributed to poor management. Many articles cajole the small business entrepreneur to pursue a variety of management practices to improve performance (Rocha and Khan, 1985; McEvoy, 1984). Yet there is sometimes conflicting evidence about these practices as applied in small businesses. For instance, Greene (1989) notes that published research about the need for and effectiveness of planning for small businesses yields conflicting conclusions.

Henz (1986) notes that some of the practices of managers in larger firms are not directly applicable to the small business setting. Drucker (1985) contends that entrepreneurial work and managerial work are not the same. And Castaldi (1986) noted there were differences in role perceptions among CEOs who were owners versus non-owners of their businesses. Yet a review of several books directed at small business managers suggest little or no modification of basic management principles which were derived from large business settings (e.g., Sondeno, 1985; Siropolis, 1986; Broom, Longenecker and Moore, 1983). Indeed, some empirical literature (Taylor and Banks, 1992; Smith et al, 1988) suggests that entrepreneurs are not completely unique compared with professional manager cohorts. Despite works which argue a need for different approaches for "entrepreneurial" versus "professionally managed" firms (e.g., Flamholtz, 1986; Miller and Toulouse, 1986), "professional" principles of management continue to be touted as beneficial for the small business manager (Hodgetts and Kuratko, 1986).

Nonetheless, management principles have been under attack in the academic community since the advent of the human relations movement. The idea seems to be that management principles dehumanize or make light of the human dimensions of organizations. A poll of 3,747 managers and supervisors taken by Archer (1990) found that . . . "Less than 4 percent were able to name more than one principle," and "Less than two percent were able to explain the significance and meaning of a principle once it was identified." (p. 19) In a similar poll of 872 MBA students, "Less than six percent . . . . were able to name more than one principle," and "Less than three percent were able to explain a principle once it was identified."

A review of 122 textbooks designed for "principles of management" courses revealed that "practically every text dismissed the principles of management as being inappropriate for modern day use." Yet many texts for small business management courses continue to elaborate on basic management principles.

Archer concludes that management academics have jumped from the notion that principles are not mutually exclusive and must be applied in some proportionate sense, both of which create "measurement" and other problems in research, to the idea that we should not attempt to do the research required to apply management principles in any organization, large or small. This may be an intellectually satisfying, but lazy, conclusion.

The authors think that the appropriate approach would be to explore the application of management principles to business situations through research which may lead to a far more tenable conclusion for management academics. Without principles, management theory may be overly situational and idiosyncratic.

Consultants and providers of training programs for small business managers could also perhaps benefit from a closer examination of the applicability of "professional management" principles as applied in small businesses. This research is a start in that direction.

The principles which managers are urged to follow deal with planning organizing, staffing, directing and controlling. There is no dispute that these activities must be performed. What is questionable is whether various prescriptions about how these activities should take place are applicable for all circumstances -- hence taking the form of principles. Our research examined this by exploring responses to a selected set of principles among small business owners.

METHOD

The design used for this research was a comparison of the management "knowledge" between two groups, Dun and Bradstreet (D&B) clients and Louisiana Small Business Development Center (SBDC) clients. An attempt was made to discover whether or not potential and existing small business people were better prepared in management "knowledge" than a group of small business people who had evidenced survival capacity by existing long enough to merit a Dun and Bradstreet rating.

To provide a basis for comparison, a questionnaire was drawn up using a series of assertions regarding planning, organizing, staffing, leading, and controlling "principles" for small business. Hodgetts (1982) presents a formal listing of 32 such principles across these five areas. From these, we narrow the list to four statements for each of the five areas. Two in each area were stated consistent with the principle, and two were stated in a way which was inconsistent with the principle. All statements, however, were worded affirmatively in the form of an action a manager might choose in operating the business. [Full questionnaire is available from the authors.] Respondents were asked to indicate whether they concerned themselves with these assertions using a Likert scale ranging from Always to Never.

The "correct" responses represented a consensus of colleague responses. Specifically, local colleagues and five Small Business Institute Directors agreed to review the assertions, make recommendations for wording, and assist in achieving the consensus "right" answers. The "correct" response was the consensus that the firm should "always" or "frequently" do those things when the assertion agreed with the principle, and "seldom" or "never" do those things when the assertion disagreed with the principle.

Sampling

The Dun and Bradstreet client group tested was a sequentially selected probability sample of "non-professional" small businesses (fewer than 100 employees) located throughout the contiguous 48 states. The sample was drawn from a mailing list obtained from Dun and Bradstreet. The second group of potential respondents was chosen from a list of Louisiana Small Business Development Center clients who attended one or more workshops where basic management would have been covered. A sequentially selected pro probability sample of 300 was drawn from that list.

Five hundred questionnaires were mailed to the Dun and Bradstreet sample. A three week cut off was established for response. Because of a low response rate, an additional 500 questionnaires were mailed ten weeks later. A total of 111 questionnaires were returned from these two mailings for a return of 11 percent.

Three hundred questionnaires were mailed to the Louisiana Small Business Development Center list at the time of the initial Dun and Bradstreet mailing. A total of 31 questionnaires were returned for a return rate of 10 percent. No follow up was attempted.

The returned questionnaires were edited, electronically entered, and analyzed using an SPSSX program.

FINDINGS

Table 1 presents results in the form of adherence to management principles. Recall that one half of the statements on the questionnaire were phrased in the affirmative and the other half in the negative, relative to the principle. Adherence (Pro) to the principle means the respondents indicated they "always" or "frequently" concerned themselves with the management issue when the questionnaire statement of principle was phrased in the affirmative, or "seldom" or "'never" followed the questionnaire statement when the principle was phrased in the negative. Conversely, non-adherence (Con) to principle means respondents "occasionally," "seldom," or "never" followed the positive statement of principle, or "always" or "usually" or "occasionally" followed the negative statement of principle.

Planning

It is ironic that a small majority of these managers believe they can achieve their objectives without an explicit plan, despite a strong belief that when workers understand a plan they will help implement it. The hard work of putting together an explicit plan gets mixed reviews -- an almost equal split of adherence and non-adherence was found. And the SBDC group was somewhat more skeptical about the value of planning. Perhaps the issue of "formality" is at play here, a pattern found in some other results explained subsequently.

Organizing

The majority of both groups see the benefit of clear job specifications and "unity of command." But both groups disagree with principles about "span of control" and delegation. These managers think they can manage more employees than their "big business" counterparts, and are loathe to delegate decision-making tasks. As will be seen, this is consistent with a pattern of maintaining personal control which emerges in other "violations" of management principles.

Staffing

There is general agreement with the principles of staffing by the majority of both groups. But a small majority of the SBDC group prefers to rely on recruiting friends or uses knowledgeable referrals, rather than using an open job search for the best available employees. This might be a function of managerial experience. The managers of the SBDC group have fewer years of management experience than those in the D&B group. The D&B-group may have exhausted their sources of friends and acquaintances, or the SBDC group may have less confidence in hiring "unknowns" in the early years of their business when survival is at risk.

Directing

The major exception to adherence to management principles in this area deals with methods of communication. In spite of growth, which usually leads to more formal means of communication, these managers prefer to use informal methods and direct contact with employees.

Controlling

This area exhibited the largest amount of divergence from management principles. The majority of managers in both groups handle the large and small problems personally. (Recall that the majority prefers not to delegate.) And the majority responds to problems as they arise rather than prespecifying specific performance standards measured on a regular basis. If controls cost too much, a small majority finds control techniques to be less useful.

Group Differences

For the most part, the SBDC group was quite similar to the D&B group in their responses. The only statistically significant difference was for questionnaire item P. While both groups agreed with the principle, a larger majority of the SBDC group wants to clearly spell out each person's job so employees know exactly what to do. Again, this may be related to managerial experience -- those with less experience (the SBDC group) may feel more confident if they can provide specific direction to their employees.

We thought that there might be differences between managers who characterized their business as very successful (versus less successful) in their degree of adherence to management principles. Statistical (chi-square) tests revealed this is not the case. We also tested for differences in experience. Again, there were no statistically significant differences in response patterns based on years of experience, except the two mentioned earlier.

DISCUSSION

Given the nature of these firms, perhaps the findings are not too surprising. These managers can be characterized as informal reactive controllers. The patterns of non-adherence to principles show divergence in areas of formality and control.

As a group the majority of these managers tend to operate with an informal approach to managing their businesses. They believe they can achieve objectives without explicit plans. They rely on direct and informal channels to communicate with employees, rather than formal methods. Employee recruiting is based on friends or acquaintances making referrals rather than formal hiring mechanisms. They do not use specific standards to measure performance on a regular basis. This ad hoc style is used by successful and less-successful managers alike.

Similarly, these managers exhibit a tendency to maintain direct control and involvement. They believe they can manage more employees. They are less willing to delegate decision authority and they prefer to deal with all problems personally. Also, there is a strong desire to provide specific direction to employees by spelling out clear job descriptions, especially among the less experienced SBCIC group.

Clearly, there is a difference between what these managers do and what principles of professional management specify. As stated by Flamholtz (1986): There is a qualitative difference between an entrepreneurship and a professionally managed organization. The former tends to be characterized by informality, lack of systems, and a tree-spirited nature. The latter tends to be more formal, to have well-developed systems, and to be proud of its disciplined, profit-oriented approach.

What is quite interesting is that those who have been exposed to some management training respond in the same way as non-trained managers. Moreover, there are no reported differences in performance. Daily and Dalton (1992) found no financial performance differences between firms headed by founders rather than professional managers. But they agreed with Whisler (1988) that the founder may need to yield control and share power once a firm reaches a threshold of size and complexity requiring more professional management. Miller and Toulouse (1986) also found that delegation and use of professional managers was associated with better performance. We cannot address this issue directly, since we have no data from larger firms. But our results call into question whether some of these principles are valid.

We might conclude that these managers are failing to abide by some of the basic management principles, and might do better to adhere to the theoretical prescriptions. Nonetheless, there is no evidence in this sample that adherence to principle would yield greater success, at least by self-definition. Moreover, the results seem to call in question whether the principles themselves are valid. Indeed, some management theorists argue that the application of these principles varies with contingencies, such as size. By definition, these are smaller organizations. Contingency theory posits that less formality is appropriate for smaller size firms. Perhaps these managers would not define themselves as successful if they did not believe they were in direct control of all aspects of the business.

While these principles were drawn from a book written for small business management, they appear to be derived from basic management principles which were developed within larger, more complex organizations. Yet small firms are not just little versions of big firms. Size and complexity are variables of significance which influence how management tasks can be accomplished. As such, the principles themselves may be less than valid for small businesses. This is especially true of startup ventures, or micro businesses. Here, the entrepreneur typically is directly and personally involved in all the critical tasks of not only marketing, finance and operations, but all the management activities (Henz, 1986). While the tasks of planning, organizing, directing and so on remain the same, the nature of how the tasks are performed might change as the organization develops. Flamholtz (19861 stated this well:

Above all, entrepreneurs possess a strong desire to be independent of others' ability to control their behavior. They like to feel "in control." . . . Fledgling enterprises need strong direction and open-ended commitment to make everything work properly. At this time, a compulsive CEO who knows about everything that is going on and pays attention to the smallest detail will have a tremendous positive impact on operations. Many consequences of an entrepreneurial CEO's desire for control, however, are less favorable during the later stages of a company's development. . . . Even though the firm has grown in size and added many managers and professional specialists, the CEO may remain the most skilled person in the company in most, if not all, areas. This means that the CEO has not been able to increase the company's capabilities beyond his or her own admittedly considerable personal skills. Such a situation puts limits on the organization's capacity to grow and develop.

In other words, these principles may apply for organizations which have developed a need for "professional management" as opposed to entrepreneurial management.

Hence, while the results are not surprising, those who consult with or provide training and education for small business managers may want to consider whether some of the basic management principles really apply for this population of managers. Prescribing the use of theoretical management practices which work for large bureaucratic organizations may be a disservice if they fail to provide guidance out of context.

We should hasten to add that this exploratory study leaves many questions unanswered. While management educators seem to have dropped "management principles" from teaching and research in the last two decades, there seems to be enough observational evidence to support the notion that such principles may exist and may serve useful purposes. To confirm their suspicion that management principles are no longer useful to the management profession, management educators need to conduct sufficient research. Such research should be relevant to both large and small organizations.

Little attention seems to have been given to the application of traditional management principles to small organizations. Small business management professionals need to determine if and to what extent such principles can reduce the failure rate among small enterprises. Too, some attention may need to be given to the transition from small entrepreneur managed organizations to small business managed organizations. The authors' experience in small business consulting suggests that there comes a time in small entrepreneur managed companies when formal organization is imperative.

The body of research from other disciplines, in particular small and large group social sciences, needs to be thoroughly examined to determine if, in the development of groups, scalar organizations evolve and, if such organizations do evolve, why they do. It is possible, for example, that technological changes in communications have rendered the need for scalar organizations and the accompanying "management principles" obsolete. The collapse of middle management seems to indicate that the old communications roles of middle management no longer exist.

Questions remain which must be answered. Can upper management, with available technology, deal with more people now than in the past? Have organizations gotten larger than it is possible to manage? Does this mean that the accompanying collapse in middle management affirms the idea that smaller organizations are more efficient? If so, why? Is the collapse of middle management an advanced economy phenomenon? Are management principles still applicable to developing economies-with lower levels of technology? Given the globalization of business and business development strategies, the imposition of modern management teaching on less developed countries may be a disservice.

In conclusion, we are calling for more, not less, research to verify the usefulness of management principles, both at home and abroad. Perhaps the field has prematurely dismissed the basics in its quest for more elaborate theories. Perhaps it is time to return to our roots to reexamine these principles and their global implication.

Additional research

The authors think that the appropriate approach would be to explore the application of management principles to business situations through research which may lead to a far more tenable conclusion for management academics. Without principles, management theory becomes purely situational behavior. This position makes the teaching and learning of management a one life at a time proposition. Each new generation of managers is forced to learn by experience in that generation.

While management educators seem to have dropped "management principles" from our teaching and research in the last two decades, there seems to be enough "observational" evidence to support the notion that such principles may exist and may serve useful purposes. To insure that "management principles" are no longer useful to the management profession, management educators need to conduct sufficient research into the lack of applicability of management principles" to modern management practice in organizations, large and small.

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Is it is possible, for example, that technological changes in communications have rendered the need for scalar organizations and the accompanying "management principles" obsolete. The collapse of "middle management" seems to indicate that the old communications role of middle management no longer exists.

Can upper management, with available technology, deal with more people now than in the past.

Have organizations gotten larger than it is possible to manage and the accompanying collapse in middle management is the result of a realization that smaller organizations are more efficient? Why?

Is the collapse of middle management an advanced economy phenomenon? Are "management principles" applicable to developing economies with lower levels, of technology? Given the globalization of business and business development strategies, the imposition of modern management teaching on less developed countries may be a disservice.

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TABLE I

ADHERENCE TO MANAGEMENT PRINCIPLES

	D&B(1)		SBDC(2)	
PRINCIPLE	Pro	Con	Pro	Con
A. Planning is a useful exercise	70	30	60	40
B. Plans should be flexible	66	34	61	39
C. Explicit plans enhance goal achievement	46	54	48	52
D. Worker understanding of plans aids implementation	84	16	84	16
E. Span of control should not be too large	23	77	30	70
F. Job specifications should be clear *	81	19	94	6
G. Employees should only report to one boss	62	38	67	33
H. Some decisions can be delegated	37	63	26	74
I. Recruit the best available employees	57	43	47	53
J. On-the-job training and workshops help employees	57	43	61	39
K. Clear job descriptions yield higher motivation	65	35	71	29
L. Clear job descriptions and training improve employee competence	70	30	68	32

M. Personal goals of employees will be achieved if business goals are achieved	61	39	68	32
N. Growth requires use of more formal communications	32	68	33	67
O. Direct employee contact generates better results	95	5	84	16
P. Managers need to understand what motivates employees	82	18	71	29
Q. Top managers cannot deal with all problems personally	16	84	26	74
R. Control is aided y specific performance standards	29	71	41	59
S. Understanding control techniques leads to better control	74	26	84	16
T. Control techniques should detect the nature and causes of problems	46	54	48	52

(1) Percent of D&B respondents (N=110) who indicated adherence (Pro) or non-adherence (Con) to the principle.

(2) Percent of SBDC respondents (N=31) who indicated adherence (Pro) or non-adherence (Con) to the principle.

* Significant difference between D&B and SBDC respondents ($p<.05$)

Intellectual Property Rights
& Associated Challenges for Small Businesses

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ABSTRACT

This paper discusses some of the important issues relative to intellectual property rights with the purpose of assisting small business persons and entrepreneurs to be aware of these rights. There is a global effort to encourage free trade and to enforce the rights of business on an international level through international and national laws. While increased international trade opportunities are available to small businesses, they must understand their rights with respect to intellectual property and ensure that they take the necessary actions to ensure these rights. Patents, trademarks and copyrights are, in fact, assets which must be treated just as are the products, processes, or services of small businesses.

INTRODUCTION

There is a considerable amount of discussion and literature pertaining to the myriad new opportunities and challenges which have resulted from the many changes which have occurred throughout the world during the past decade or so. This paper can only hope to provide an overview of the challenges and opportunities of intellectual property rights to small businesses.

Small businesses have been receiving increasing attention from both scholars, governments and the popular press, as well as others. This focus reflects the growing recognition of the substantial economic and social contributions of small business. They include economic growth in the form of new businesses, the introduction of many new products and services, increased employment opportunities, as well as opportunities for minorities and women (Bartol & Martin, 1994). While each of the four contributions are important, the innovative approach of small business in assessing entrepreneurial opportunities, of exploiting change in providing new products and services, quickly and "tailor-made," is likely the major factor in the success of a small business. There are no layers of bureaucracy and "red tape" frequently experienced in large businesses. The limited overhead keeps costs lower and permits the manufacture of smaller numbers while realizing a profit.

Nevertheless, small businesses can easily fail for a myriad of reasons. One reason would be if their product or service is duplicated or improved upon by others, especially large organizations or in nations where labor and other production costs are less. For this reason it is essential that small businesses take the necessary precautions to understand their intellectual property rights (IPR) and to take prescribed actions required to ensure this vital economic asset is protected. The remainder of the paper will, in general, address actions to be taken by small businesses relative to IPR, a discussion of patent, trademark, and copyright factors, IPR piracy, and, finally, IPR and the legal system.

LITERATURE REVIEW

In the U.S., as in countries world-wide, intellectual property protection for a business, large or small, can be and usually is the key factor in an organization's success. Bringing one's idea to the marketplace often requires a business to show its technology to a third party such as a potential investor, manufacturer, a supplier, or others. Unless these individuals sign confidentiality agreements, the business may have no protection in stopping them from disclosing the technology to others who may copy and steal the technology. Thus, small businesses must ensure that anyone made privy to the technology of a new product, research, patent, trade secret, and so forth, should sign a confidentiality/non-disclosure agreement (Steinberger, 1990).

An exception to the above are communications with one's attorney, which is protected under the attorney-client privilege offered by most states in the U.S. With this privilege, attorneys are subject to sanctions that can include disbarment if they disclose communications with their client (either written or verbal) to third parties without consent of the client (Steinberger, 1990).

It also is important for entrepreneurs or small business persons to establish the date at which they conceived their inventions. The U.S. recognizes a first to conceive standard, that is, the first person to conceive of an invention is entitled to receive a patent, even if a patent is awarded to someone else. The invention should, at a minimum, be reduced to a written description that would enable someone else to make and use the idea. There is no requirement that the invention be reduced to an actual working model. The United States Patent and Trademark Office has established a Disclosure Program that allows inventors to explain and record their inventions in sufficient detail to enable a person having ordinary knowledge in the field of the invention to make and use the invention. This explanation can include drawings. The inventors must sign their disclosures and mail them to the Patent and Trademark Office where the disclosure can be kept on file for up to two years (Steinberger, 1990).

The program described above helps inventors establish a conception date for their inventions and is more creditable than having the inventors mail their disclosures to themselves or another person by mail. In addition, having their disclosures at the Patent Office can be used as a good marketing tool. Other traditionally accepted practices to provide evidence of conception include witnessed and notarized records such as those kept in daily journals. Proving a conception date such as filing with the disclosure program, however, is not a substitute for an actual patent application because the former offers no legal protection as a patent would (Steinberger, 1990).

Patents

A U.S. patent gives the owner the right to exclude others from making, using or selling the invention for up to 17 years. A U.S. patent is valid in the United States, its territories and possessions. A utility patent may be obtained for a new process, machine, article of manufacture, composition of matter, or any new or useful improvement thereof. Also, special patents called design patents may be obtained for plants and ornamental designs (Unpublished paper, 1992). To be patentable, the invention must be useful, new or novel from prior art, and non-obvious to a professional in the field. There is no requirement that an invention be reduced to practice. The patent must describe the invention in detail such that one having ordinary skill in that specific field can make or use the invention (Unpublished paper, 1990).

Prior art that can prevent an invention from being patented includes, but is not limited to, U.S. patents, foreign patents, brochures, catalogs, manuals, movies, advertisements, and so forth. Almost anything which can show proof of invention before an inventor's conception date can be used against that inventor. Furthermore, if an inventor discloses an invention to the public, the inventor has only one year to apply for a patent or may lose the chance of getting a patent. Disclosing to the public includes, but is not limited to, an inventor offering an invention for sale in a proposal agreement to third parties, published articles and advertisements, other literature publications, sales to third parties, and offers to sell to others. Any type of public use or sale in the U.S. or publication of the invention anywhere in the world, more than one year prior to the filing of a patent application, will prohibit a granting of a patent (Steinberger, 1990).

It should be noted that, on the average, only two out of 100 patented products make enough money to recover their initial patenting costs. Although a patent application is denied about 90 percent of the time when first submitted, more than one-half of all applications filed turn into a U.S. patent. Filing for a U.S. patent, however, is expensive. The government has filing fees that depend on the size of the business when filing for a patent. Sole independent inventors filing on their own behalf, or a small business having a basic filing fee, presently costs $355.00. Many other government fees, however, are applicable during patent prosecution including, but not limited to, a recordation fee of $40.00 late fees and issue fees once the application is deemed allowable ($585.00 for a small business). Once a patent is issued there are maintenance fees required to keep the patent rights in force. Maintenance fees for small firms are currently $465.00, $935.00, and $1,410.00, due at years 3.5, 7.5, and 11.5, respectively. For the average SME the government fees, combined with patent attorney fees or patent agent fees, can be expected to be about $3500.00 to $4000.00 in order to receive a U.S. patent (Steinberger, 1990).

Trademarks

Trademarks cover the names of products or services. A common misconception in the U.S. is that the filing and acceptance of a Certificate of Incorporation by a state automatically permits the company to use the name in the charter without legal challenges from third parties. A state corporate name, however, can be invalid if there is a federal trademark for someone else for a similar service. Types of federal trademarks include trade names, service names, slogans and symbols (Basic Facts, Unk).

Similar to filing fees for a patent, there are government fees for applying for a federal trademark. The fee for filing for a federal trademark is about $250.00 and the issue fee is $100.00 for small businesses. Similar to patents, it is recommended that a trademark search be conducted at a Patent Depository library to first determine if a trademark already exists. Search fees are usually less than patent search fees, but generally will cost several hundred dollars. Although not required, an attorney may be helpful. Attorney charges for trademark prosecution are generally less than that of a patent , but usually cost between $750.00 and $2000.00 (Steinberger, 1990). In addition, each state frequently has its own trademark registration requirements.

Copyrights

Protection by copyrights encompasses written materials such as those in manuals, books and magazines, advertisements, video tapes, music, computer software, t-shirt designs, stickers, and so forth. The basic requirement is that the material to be copyrighted must have originality. In the U.S. obtaining a copyright is generally an automatic registration process that requires filling out the necessary forms for submittal to the Library of Congress. The life of a copyright is limited to the life of the author plus fifty years, or 100 years for an SME (Steinberger, 1990).

Countries belonging to the Berne Convention for the Protection of Literary and Artistic Works, as in the case of the U.S., are required to protect the "moral rights" of those having copyright material. Moral rights include the right to be known as the author of the work, to prevent deforming changes, to prevent others from using it improperly, and to withdraw it from distribution if desired. A related right permits profits to be earned from the work copyrighted (Middleton & Chamberlin, 1991).

The basics for obtaining IPR for SMEs is now well documented in most countries. The major problem is ensuring that these vital economic assets are enforced, particularly beyond national boundaries. The following will provide selected information which suggests that there is a strong world-wide movement to support IPR.

Piracy of IPR

It is clear that the risks to IPR reduces the flow of products, services, technology, and investments, if not protected. The International Finance Corporation reported the results of a recent survey on the extent of IPR protection on potential investments. It was found that the importance of such protection is dependent on the type of investment. The study found that only 20 percent of the firms surveyed believe that protection is important for distribution and sales investments. About 30 percent called for protection in investments in production and assembly, 50-60 percent for investments in manufacturing facilities and 80 percent for research and development facility investments (Seltzer, 1994).

India, Thailand and Taiwan lead the Asian countries in violations of IPR laws. Other Asian nations, including South Korea, the Philippines and Indonesia were also included in the list of infringers compiled by the U.S. Trade Representative. However, these countries maintain that they are being targeted by a selective policy of the U.S. While the pressure on Asian countries continues, it is believed by some that violations by Eastern European and Latin American countries are being overlooked due to political and economic considerations (Awanohara, 1992).

Asian countries such as Hong Kong, China and Taiwan continue to be the leading manufacturers of quality fakes in the world. U.S. demands for the strict enforcement of laws on the protection of IPR are forcing these countries to adopt stricter measures against individuals or companies engaged in the infringement of IPR. China, for one, was vigorously pursuing a campaign against pirates of intellectual property in 1992 (Blass, 1992).

IPR and the Legal System

The legal system eventually plays a role in protecting the IPR of small businesses. For example, competition in the semiconductor industry is increasingly moving from the marketplace to the courtroom. Chip companies, led by Texas Instruments (TI), want profits on the basis of patent rights and such companies are waging legal battles over alleged infringements. TI, which was successful in winning substantial royalty payments from the Japanese, now accuses U.S. chip manufacturers of violations. TI also pursues IPR through the International Trade Commission (ITC), a tactic that is deeply resented. Other companies that have been involved include: Motorola Inc. and Hitachi Ltd. concerning a microprocessor design; and (2) Intel Corp and Advanced Micro Devices Inc. over the microprocessor itself (Weber, 1991).

While the examples above are dominated by large businesses, small businesses must protect their products and services as well. Knowledge of IPR by small businesses is only a start in ensuring successful control of their product or service line. Legal problems can be minimized if proper actions are taken in advance. For instance, some small businesses use trademark-protected graphic symbols to advertise their products. An individual holding the copyright for such a trademark has the right to legally end the copyright's transfer to the trademark owner. Mark owners can protect themselves against this eventuality by having graphic trademarks created by employees and registered under the 'work-for-hire' doctrine of the copyright law. Trademarks which are not works made for hire should not be registered for copyright (Fletcher and Sotis, 1993).

The plethora of potential legal issues facing small business owners makes the need for competent legal help essential. There are a variety of billing arrangements and services that can be arranged between business clients and lawyers and it behooves small businesses to learn about them (Ehrman, 1994).

Patent lawyers and others who practice legal services regarding IPR protection have found apathy on the part of both judge and jury. Trial lawyers face the challenge of presenting these cases so that they hold the jury's interest. Experts good at presenting complex material in an understandable and interesting way are necessary, and the ideal expert has case-specific experience and is a leader in the industry on trial. It may also be necessary to consult expert witnesses for technical advice (Mahfood, 1992).

CONCLUSIONS

Intellectual property rights of businesses, both large and small, are receiving increased attention throughout the world. Small businesses, however, often fail to protect their investments in new product design even though several mechanisms for doing so are available. The protection provided by mechanisms such as copyright, trademark and design patent help small businesses to become and remain competitive in an increasingly global market place (Knoble, 1994). Copyright protection is not expensive and is the easiest way of protecting one's creative idea. Reproduction and distribution of the work and its public display are controlled by the copyright. The design patent includes industrial designs and the designs of useful items. In the case of novel designs of furniture, designer tea kettle or a light fixture, the design patent is more appropriate. While registering a design is more expensive than registering a copyright, the former provides the most protection (Augustine, 1993).

The above is especially true with respect to information products. Information products raise legal questions concerning property rights and qualitative assurances. The intangible nature of information complicates the application of commercial law to transactions involving information. The method of distribution and the subject matter of the information product affect the nature of property rights. Copyright is the most significant property right for information products of wide distribution, whereas access control is important for products of limited distribution, including computer products (Krauthaus and Nimmer, 1992).

There are a myriad of materials available to small businesses in assisting them to learn and understand IPR and how to protect them. U.S. federal, state and local governments provide a multitude of information available to those seeking such information. For example, The Florida Product Innovation Center, in cooperation with the Florida Small Business Development Centers and the U.S. Small Business Administration, provides a resource manual for inventors. It is a guide to help inventors and small business persons to protect their ideas, develop products, and create a business. It includes detailed information on patents, trademarks, copyrights and how they may be obtained (Riddle, Unk).

The U.S. government seeks to protect IPR interests by improving international standards and through better enforcement of agreements with major trading partners. Doing so encourages research and innovation by ensuring that all businesses, large and small, will receive the benefits of their investments (Protection, 1994).

Small businesses, with their entrepreneurial ways and strong innovative products and services, have much to gain as enforcement of their IPRs grow legally and morally throughout the world. Global trade, with the ever larger number of trade pacts and regional agreements, provide small business with a myriad of new markets. If they ensure that their products and/or services are protected, through the means discussed herein, they will have done their part. The rest is up to trade agreement clauses, governmental legislation and the courts.

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MIS AND CULTURAL DIVERSITY: SUPPORTING BANKING REGULATORY COMPLIANCE

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ABSTRACT

The financial products and services marketplace is crowded, competitive, fast-paced, and subject to regulatory scrutiny and sanctions. In this market, culturally diverse populations seek mortgage and other loans from lenders. Federal Deposit Insurance Corporation (FDIC) oversight ensures Community Reinvestment Act of 1990 and Home Mortgage Disclosure Act compliance by these lenders. Emerging technologies exist that can greatly aid financial institutions with all compliance requirements, documenting their compliance, and provide a distinct competitive advantage. These technologies include neural networking, group decision support systems, and geographic marketing (management) information systems. They are powerful tools for supporting fair decisions made from information-rich data, and allow powerful graphic presentation of many of the findings. Although quite powerful, these newer techniques require less technical and statistical knowledge (are user friendly) than the majority of the decision support methods traditionally used today. The growing adoption of these newer technologies by lenders means sophisticated computer decision making assistance and documentation to protect benefits legislatively guaranteed to many disadvantaged groups. These systems, assisting in systematic, equitable decisions, protect targeted borrowing groups and protect the institutions themselves.

INTRODUCTION

Due to the fast-paced, volatile, and still regulated nature of the current financial environment, lending institutions must exercise much care in the creation and management of their loan portfolios, and in the conduct of all of their activities (Arend, 1992). The need for careful management stems both from the need to control risk and from the need to comply with regulatory mandates. This is especially true of smaller institutions in local areas in which decision making may be based not solely upon lending criteria but also upon personal knowledge of borrowers. Also, on occasion the patterns of lending in financial institutions may not proportionally reflect the cultural diversity of an area for one reason or another. An institution may be questioned about how loans are evaluated for risk and profitability, and may be challenged about these core decision making processes. Hence, it is essential to document decision processes, demonstrating that the decision methodologies are unbiased.

Federal regulatory scrutiny regarding loan practices, such as the mandates of the Community Reinvestment Act of 1990 (CRA), dictates the use of appropriate, documented, Systematic methods of making loans to all qualified applicants in an area. Also, there is a critical legal and public relations requirement to avoid the actuality or appearance of biased loan practices. Periodically a financial institution is challenged about lending practices, often for presumed bias in mortgage lending (so-called redlining). Under new CRA guidelines, one evaluation factor is cited as " ... the geographic distribution of the institution's credit extension, credit applications, and credit denials" (Cocheo, 1991; King, 1993). Institutions found not in compliance with the fair lending/discrimination guidelines face unprecedented risk due to an increased regulatory emphasis; in addition it is hard to predict what may be expected since "... legislative, regulatory and agency examination mechanisms are rapidly evolving on dozens of fronts. Banks that wait for their examiners or agency guidelines to explain what's expected of them may find that the first clarification ... comes in the form of an enforcement action ..." (Barefoot 1993, p. 28). But with such constraints, fiduciary responsibility still requires operating the institution with appropriate concern for the owners. Clearly, the recent Savings & Loan fiasco is an exemplar of the worst cases of imprecise, biased, and fatal lending decisions.

Modern newer technologies can assist bankers in decision making in delicate areas; these methods can deflect criticism about bias and improve overall profitability. New Community Development Financial Institutions (CDFI) legislation rewards that lend aggressively in low income areas (Chaddock, 1994); this type of activity in itself represents a que challenge to the systematic and accurate assessment of lending outcomes, since such loans are clearly near the traditional risk thresholds. Recently a keener recognition of the usefulness of decision support system, expert systems, and linear modeling techniques financial decision making assistance has emerged. Significant recent attention has been focused upon group decision support systems (GDSS). The utility and power of geographic marketing (management) information system (GMIS) is only now being recognized by academics and practitioners in many disciplines, including banking and financial management. Artificial neural net systems (ANS) have now evolved to such a degree that they can surpass traditional methods of predicting loan defaults, and can even project the potential for loan recipient bankruptcy.

The objective of the paper is to describe how such decision support technologies - artificial neural networks, GDSS, and GNUS - may be used to assist and supplement financial decisions effectively and consistently while reducing risk. At the same time such methods can provide key decision making documentation not previously available. Further, the results of the various analyses and discussions below show that these methods can be superior to current lender management and prediction techniques. While decision making superiority is desirable under any circumstances, it is particularly critical in compliance situations. Frankly, chief executives and other managers in financial institutions must excel in both financial acumen and compliance activities to be judged a success, given the current regulatory environment. It would seem foresightful and responsible to utilize the very best methods that can be implemented in an institution to manage these matters.

The authors describe several emergent technologies and provide examples of their use in the financial institutional decision making setting. They discuss outcomes and conclusions, and finally recommend future directions for both practitioners and researchers.

THE EMERGENT TECHNOLOGIES

The technologies discussed are, first, artificial neural nets, then group decision support systems, and finally geographic management information systems. More than one example is sometimes given in order to demonstrate the flexibility of these technologies.

Artificial Neural Networks

Artificial neural networks, or simply neural nets (NN) are a relatively new and increasingly popular prediction technique that is being used in a variety of decision settings such as predicting stock price trends, assessing loan risk, and predicting the likelihood of bankruptcy (Hammerstrom, 1993). Other uses include rating the quality of bonds, detecting fraudulent signatures on checks and legal documents, and other such tasks. For example, Visa International has contracted with HOC, Inc. to develop a neural network system that will identify high risk credit card transactions. Additionally, AT&T, Intel, Sharp, GE, American Express, Chase Manhattan Bank, Fujitsu, and Nippon Steel have all developed neural network systems for business functions. Such successful applications have inspired other businesses to explore neural networks as means of gaining or maintaining competitive advantages (Shandle, 1993).

Neural nets are a form of artificial intelligence modeled on the biological construction of the human brain(1) and have been demonstrated to be more accurate in many cases than competing forecasting methods often using variations of multi-variate regression, e.g., logistic regression and multi-variate discriminant analysis (e.g., Leonard and Banks, 1994).

Neural networks provide several advantages over previous statistical modeling and prediction techniques. NN's are not programmed like traditional software packages but are "trained" by furnishing the neural network examples of the independent variables in the data to be used for predicting or classifying the dependent variable. The process is repeated, often for thousands of iterations, until the NN consistently "recognizes" underlying associative patterns between the inputs (independent variables) and the outputs (dependent variables).

Therefore, NN methodology does not require the underlying data to meet any of the traditional statistical assumptions. Recall that regression techniques require that data satisfy, for example, assumptions of homoscedasticity (variance) and independence of variables, and also may assume that the underlying relationships within the data are linear, thus requiring the inputs to be adjusted to satisfy the linear assumption. Other techniques also mandate additional conditions.

An extensive discussion of technical issues exceeds the intent of the paper, it is accurate to say that using NN's precludes those concerns normally associated with such assumptions; the data characteristics required by regression techniques are simply irrelevant in NN analysis (White, 1989). In many modelling techniques missing data can be a big problem, too, but NN'S are able to develop accurate models (within a measure of acceptable fault tolerance) despite data faults.

Until recently, NN's have been difficult to use, requiring knowledge of the mathematical theory behind the systems. Now, affordable commercial packages are available that guide users through the NN training process step-by-step. The user need not be a programmer, a statistician, or an expert with NN, but simply must know the analytical components of the managerial problem.

The user decisions arc: (1) the input variables to be used, (2) how many layers and nodes in each layer the network will have, (3) the transfer function, and (4) other training (or learning) parameters. The network is "trained" using in-sample data until the average error between the forecast and real values is reduced to a minimum (as close to zero as possible). Finally, the trained NN predicts, using new, out-of-sample data to test whether the user decisions made in earlier stages worked. If the resulting forecasts miss, one may try new variables, different numbers of layers and nodes in the network, or different transfer functions. The development of an NN may take several iterations before an accurate modal for the management problem can be generated.

Two Examples Using Neural Networks

The authors now present two examples of NN analysis: (1) bankruptcy prediction and (2) loan risk assessment. Both are management decision support needs in lending settings.

Bankruptcy Prediction: Financial data was obtained from 63 firms (some of which represent bankruptcies) from Compustat tapes; nine commonly-used financial ratios were computed for each.(2) The financial ratios chosen to characterize each firm were: (1) Net Income/Net Worth, (2)Cash/Total Assets, (3) Earnings before Interest and Taxes/Total Assets, (4) Total Equity/Total Liabilities, (5) Working Capital/Sales, (7) Total Assets/Total Long Term Debt, (8) Sales/Fixed Assets, (9) Market Value of Stock (surrogate for firm size).

Each of the nine ratios for the 63 sample firms was compared to other firms within its same industry to determine how the sample firm compared to its industry. For example, the Net Income/Net Worth (Return on Equity) ratio was computed for sample Firm A and for every other firms in the same industry as Firm A. If the Net Income/ Net Worth ratio for Firm A fell within the top third of its industry, it was coded as "1." If its Net income/Net Worth ratio fell within the middle third of the industry it was coded "2," and if in the bottom third it was coded "3." This was repeated for each financial ratio for Firm A. Finally, this entire process was repeated for the other 62 sample firms,so the resulting data set included a set of nine industry-stratified ratios for 63 sample firms. Finally, the data set included a designation of whether the firm had failed or not (a 0 for bankruptcy and a 1 for non-bankruptcy). (A list of the firms, ratios, and bankruptcy results is available from the authors).

The data was initially analyzed using logistic regression, a traditional prediction and modeling technique which has been demonstrated to be a successful means of predicting the likelihood of bankruptcy in previous studies. The 63 cases were randomized and the first 31 were used to develop a prediction model. This prediction model was applied to the remaining 32 cases. This model correctly predicted 10/13 bankruptcies (76.9 % accuracy) and 13/19 non-bankruptcies (68.4 % accuracy) for an average accuracy of 71.9 % (Table 1).

Table 1. Summary of Logistic Regression Results

Actual	Predicted Outcomes		
Outcomes	Bankrupt	Not-bankrupt	
Bankrupt	10	3	76.9%
Not-bankrupt	6	13	68.2%

A neural net was then developed using NeuroForecaster. Total development time was about three hours (including testing of different configurations, and training time).(4) The network was trained until the average error over the training data was reduced to 9%. The neural network predicted 11/13 bankruptcies (84.6% accuracy) and 17/19 non-bankruptcies (89.5% accuracy), an average accuracy of 87.5% (Table 2).

Table 2. Summary of Neural Net Results

Actual	Predicted Outcomes		
Outcomes	Bankrupt	Not-bankrupt	
Bankrupt	11	2	84.6%
Not-bankrupt	2	17	89.5%

NN outperformed logistic regression in predicting bankruptcies. For this scenario, the NN was about 16% more accurate.

Loan Default Prediction: In this example,(5) the same program, NeuroForecaster, was used to predict loan defaults using two separate NN methods. NN techniques are compared to a discriminant analysis(6) of the same data. The discriminant analysis technique predicts membership in groups (dependent variable) using a selected assortment of presumably predictive independent variables, and the outcome is evaluated for its reliability (Tabachnick and Fidell, 1989). Users of this technique must satisfy assumptions about multi-variate normality, equal co-variance matrices, mutual independence of the independent variables, and a linear functional form (Hair, Anderson, Tatham, and Black, 1992). As noted earlier, this is not a concern with NeuroForecaster.

Data was obtained from 114 credit applications at a local bank. The independent variables used were: (1) yrs at present address, (2) yrs at former address, (3) monthly loan payment monthly income, (4) home ownership, (5) yrs at present employment, (6) yrs at previous employment, (7) number of dependents, (8) age in yrs, and (9) citizenship. The dependent variable classified was risk associated with the application (100=grant; 0=refuse). The first 102 observations were used for model development, the last 12 observations were classified. The NN and discriminate analysis results are depicted in Table 3.

Table 3. Holdout Sample Accuracy Across Methods

	Discriminant Analysis	Backpropagation NN	Genetic NN
Bank Loan Application	58%	100%	100%

The NN was trained (26,000 iterations, backpropagation mode) until the average error between forecast and actual values was reduced to 7%. When the 12 out-of-sample validation applications were evaluated using outcome values "over 50" as granted loans and values "under 50" as refused loans, the NN achieved a 100% success rate (correctly categorizing the seven bad and five good loans).(7) Using the alternative genetic algorithm mode trained to an error rate of 17%, the NN method again achieved 100% success. The traditional discriminant analysis achieved only a 58% success rate in this case.

Prediction of categories such as default or no default, bankruptcy or no bankruptcy, represent excellent uses of the NN in banking situations. The disk files regarding the setup of this decision support system can be retained and loan application outcomes can be stored. Obviously, no system is perfect. But a NN is a system that is consistent and which yields a high prediction success rate, and one which also leaves a clear audit trail. It could be used to advantage in a banking setting in which issues of bias could be raised in culturally diverse settings. The accuracy of the NN system also should enhance profitability in investment settings.

Group Decision Support Systems

One of the most recent and best methods for increasing collaborative group effectiveness and efficiency is a group decision support system (GDSS). Tasks typically facilitated by this software on networked computers, which may be but need not be co-located, include: (1) accommodating the generation, organization, and storing of ideas submitted through the keyboards, (2) editing and commenting upon shared, viewed text, and (3) voting on group alternatives that result from a GDS Ssession. Users consistently report that brainstorming sessions, often difficult to "pull off" in traditional settings (Jablin, 1981; Watson and Michaelson, 1988), are significantly enhanced.

Traditional meetings intended to generate ideas or reach decisions often are characterized by lost focuses, wasted time, dominant personalities, intimidated participants, the sheer length of time needed for "round robin" contributions, and generally low productivity (Diehl and Stroebe, 1987; Harari and Graham, 1975; Jablin and Seibold, 1978; Shaw, 1981; Watson and Michaelson, 1988).

The GDSS permits every participant to "speak" in parallel, makes every participant anonymous (equal), provides powerful stimulation due to the volume of idea generation, and permits a rich variety of differing interpretations of the ideas that are expressed (e.g., Hiltz, 1988; Hill, 1982). In addition, GDSS provides structure, leading to more focused and concentrate discussion, yielding better decisions (Nunamaker, et al., 1987). Because of the enhanced involvement, synergies, automated record keeping, structure, and ease of use, many groups can do much more in about half the time required for a traditional meeting (Nunamaker, et al., 1989).

Also, because of the automated process (and where hardware availability permits), the group size can be much larger, broadening participation and yielding more experience, knowledge, and skills to affect the management topic of interest.

GDSS Use in a Banking Setting

The authors present an example resulting from a session conducted in a small, local, home-owned bank.(8) Although early GDSS emerged as a tool used primarily within large businesses, research has shown, as in the present example, that it can readily be used by small businesses (e.g., Kilpatrick, et al., 1994).

Thirty-eight bank employees used the 54-scat GDSS in the electronic meeting room at the authors' university. A thorough description of the facility is provided by Aiken (1992a and 1992b). Employees were creating a full participation strategic plan for the bank. When asked by the moderator "If you could change one thing about the bank, what would it be?" the group generated 88 comments in 8 minutes (hereafter: 88c/8m). Other stimuli were: "What should be the role of the bank in the community?" (75c/9m), "What actions should we take to provide for success?" (98c/10m), "How is the bank perceived in the community?" (93c/9m), and "How is the bank perceived by its employees?" (91c/9m). They then ranked five areas for immediate attention. For summated rank outputs, see Table 4.

Table 4. Ranking Summary Output of Participant Ratings

Rank:	1	2	3	4	5
Category					
Training	7	12	15	3	1
Salary/Benefits	13	8	9	7	1
Building Size	12	11	2	6	7
Cross Training	2	6	8	15	7
New Products	4	1	4	7	22

A questionnaire about the session was completed by each participant following the session. The results are as shown in Table 5. Reported computer experience was over eleven years, with well over half of the participants reporting the use of word processing; eight per cent reported using E-mail, and nineteen percent had used electronic bulletin boards. While many were good at the requisite skills and seemed comfortable in the setting associated with the GDSS, few had interacted in a group like this or on a computer network. The collective opinion was that a regular verbal meeting would have required almost 400 minutes to generate a like number of ranked comments (445), but GDSS session was accomplished in 50 minutes, an impressive economy (one-eighth of the time otherwise required).

Table 5. Partial Questionnaire Results

Category	Mean	StdDev	Min	Max
Computer Experience	11.1	6.4	.5	27
Verbal Meeting Length	397.6	242.9	60	720
Process Satisfaction	4.8	0.7	3	5
Outcome Satisfaction	4.2	0.7	2	5
Willingness to Use GDSS	4.4	0.7	3	5

Other studies have shown like economies of 50-95 percent (Nunamaker, et al., 1989). Satisfaction with the session was 4.8 on a 5-point scale (5 = very satisfied). the meeting outcomes themselves (greater understanding of others' viewpoints and opinions) were rated 4.2, and willingness to use GDSS again garnered a 4.4 rating.

Specific applications for such a system in a bank, in which every employee traditionally already has a terminal available, could include strategic planning, lending policy discussions, community perceptions of institutional compliance, and other critical topics. It is clear that GDSS is more effective and efficient no matter what innovative uses may emerge.

Geographic Management/Marketing Information Systems

These GMIS systems are comprised of hardware and software to accept, store, update, manipulate, analyze and display information of all types that has been geo-coded, i.e., referenced to points on the earth's surface. Systems relate and link graphic (actually geographic) information to tabular numeric and textual data (databases) to provide far more intelligence information in the individual sets of data ever could when scrutinized separately. Manipulation of the system enables users to display annotated maps (e.g., low and medium income census tracts), add other useful levels of data (e.g., colored dots showing credit approvals, extensions, and denials), relate that data to promotional and customer service data (e.g., billboards, media areas of coverage, non-toll call areas, etc.), superimpose all branch locations with their current loan objectives and results on the resulting assemblage, and finally print out the information-rich result for documentation and further analysis. Traditional tracking methods such as zip codes often fail utterly in meeting today's CRA requirements, especially in more rural areas where large zip code areas encompass low, medium and high income households alike.

CRA examiners can be keenly aware of any glaring lack of geographic awareness.

For example, in critiquing a California bank, the examiners noted, "The bank has not made reasonable penetration into the delineated community, Neither the Board of Directors nor management are aware to the geographic distribution of credits by census tract. Our plotting of a small sample of the bank's consumer loans showed 2 of 50 approved loans were extended in low- and moderate-income census tracts: (Cocheo, 1991, p. 49).

A mid-Atlantic bank was also told it "needed to improve" by the FDIC CRA examiners: " ... the board of directors and senior management were generally unaware of the geographic distribution of the bank's loan products and accorded little or no review of lending policies and practices with regard to how they affected lending patterns within their communities" (Cocheo, 1991, p. 48). Such situations are better identified and rectified prior to CRA examiner interest. A GMS would enable ongoing scrutiny of such patterns. In addition, such a powerful management tool could prove invaluable in contrasting market potential (as identified in household level census data) with actual financial performance as the market for an ever greater variety of financial products widens. Additionally, branch traffic analyses, future site location analyses, and real estate valuations can be facilitated by GNUS and other decision support systems operated in concert (Davies, 1992).

GMIS Banking Example (Minnesota)

A Minnesota bank did an analysis of the delivery points for their products and services using a census tract base of present and potential customers (by income level). The GNUS graphic is shown as Figure 1. It should be noted that every one of the eight assessment and analysis factors required of lenders by the 1990 Community Reinvestment Act have strong geographic portions (King, 1993). CRA factors are shown in Table 6 (next page). The logic for considering a GNHS as an integrated part of a total information handling and decision support system seems clear.

OUTCOMES AND CONCLUSIONS

Overall fairness in the face of cultural diversity likely has not been optimally realized in this or any country, but obviously this is a normative judgement. However, when banks engage in the sale of their products (e.g., loans) the U.S. legislature acting through the Federal Deposit Insurance Corporation imposes conditions upon the lending institution. The provisions of the Community Reinvestment Act of 1990, including fairness and proportionality in lending, must be met. To this end, powerful modern technologies are available to assist in the evaluation of the needs, analysis of the risks, facilitation of the decision process, and documentation of the results.

Table 6. Selected CRA Assessment and analyses Factors

Assessment Factors	Analyses Factors
Community Credit Needs	NEEDS ASSESSMENT SURVEY
Factor I(A):	Credit Demand Survey
	Mapping of Applications
	National Survey Data
	Local Studies
	Housing Stock/Condition
Geographic Distribution	GEOGRAPHIC DISTRIBUTION - AREA
Factor E:	Geocode HMDA (I-IV) Loan Types
(Credit extensions,	Geocode Loan Activity - Census Tract
Credit denials,	Aggregate Loan Type - Census Tract
Credit Applications)	Map HMDA data by Appr/Deny Rates
	Tract HMDA Appl/Appr/Deny Data
	Depict Primary Lending Areas
Discrimination/Illegality	GEOGRAPHIC DISTRIBUTION - SHARE
Factors D/F:	Total Loans Possessed in Market
	Household Penetration - Accounts
	Household Penetration - Branch Trade
	Ratio of Loans to Deposits
Office Openings/Closings	TARGET AREA DELINEATION
Factor G:	Federal Target Areas (1990 Census)
	Trades Areas/Penetration of Branches
	Past Trends of Loan Penetration
	Past Loan Trends in Target Areas
	Open/Close Reports and Geography
Origination of Loans	GEOGRAPHIC DISTRIBUTION
Factor J:	Plot Lending by Type
(Housing Rehab,	Examine Demand - Loan Patterns
Home Improvement,	Individual Area Lending Potential
Small Business,	"Neighborhood Condition" Index
Residential Mortgage)	
Loan Program Awareness	SPECIAL PROGRAM EVALUATION
Factor H:	Progress of Special Programs
	Means to Improve Program Effect

In predicting loan performance and the likelihood of bankruptcies, artificial neural networks provide a better method of analysis than traditional statistical methods that have preceded the emergence of this technique. In addition, arriving at loan policies, gaining an impression of the institutions image from the community, exploring customer service levels, or engaging in any discourse in which the group wisdom leverage the efficacy of outcomes can be greatly facilitated by using a group decision support system. If used, considerable time savings and content enrichment can be anticipated. Finally, the extensive, intrinsic geographic content of the CRA of 1990 virtually mandates that financial institutions organize their most important data and challenges with much more attention to a geocoded approach and structure. This effort will inevitably culminate in the adoption by thoughtful decision makers of the evolving database management capabilities of geographic management/marketing information systems, which have incomparable analytical and display capabilities.

Cumulatively, these technologies represent a new suite of tools available to the astute manager of credit (and other) services delivery. As the ethnic composition of the served customer base diversifies, institutions must take proactive stances in adopting newer technologies to support compliance. Also, regulations are changing almost daily. It is less possible by the day to overlook managerial naivete regarding credit customers and compliance with those customer needs.

FUTURE DIRECTIONS

Challenges for practitioners are intense but straightforward: Evaluate, and where better, adopt. The constant proliferation of commercially available packages at reasonable cost in all of the categories' discussed can no longer be ignored, nor can the dramatically lower costs of powerful desktop system on which these applications can be run. These systems and methodologies are now within the financial and operational reach of even a small financial institution in need of improvement.

Researcher challenges fall into five separate areas: (1) Validation of the technical superiority of these methods over traditional methods. Comparative evaluations of differing methods must be pursued. (2) Validation of the managerial/marketing superiority of these methods over traditional methods. Superiority can be validated as the techniques find their way into business use (e.g., case histories, comparative studies, reporting practitioner qualitative and quantitative assessments). (3) Cost benefit evaluations of the newer methods. This will be mostly practitioner driven, but academic researchers may be involved (only by invitation due to proprietary financial information and methods). (4) Validation of increased effectiveness of the newer methods in achieving specific compliance goals. Lending firms, regulatory agencies (e.g., FDIC) and staffs within government will not so much research these methods as use them. Compliance may soon include formatting, storaging, and providing data to be compatible with such GNUS or other systems at the federal level. This could accelerate (and justify) local adoption. (5) Extending these methods scientifically into appropriate disciplines. Current GNUS business uses derive from earlier applications in geology, geography, cartography, forestry, agriculture, or military intelligence. Neural Nets are best when a projection of classifications based upon predictor variables is needed. The GDSS approach is suited to all disciplines interested in decisions, group dynamics, human-machine interfaces, and all other applications requiring effective, timely, and efficient group meetings.

END NOTES

(1) A single neuron of the human brain has three basic components: dendrites, soma, and axons. Dendrites collect inputs from neighboring neurons, soma process these inputs, and axons distribute processed output to neighboring neurons. Each neuron is typically connected to thousands of neighboring neurons via a veritable tangle of dendrites and axons. This arrangement facilitates what experts on this process have named massive parallel processing. An artificial neural network simulates interconnections using dendrites that are analogs of actual dendrite collectors, processing nodes that are analogs of soma, and simulated axons for output to neighboring nodes (Freeman & Skapura, 1992). The most recent developments in neural net research use a technique known as genetic algorithms (Hawley, Johnson, & Raina, 1990).

(2) This example is taken from Stocks, M., T. Singleton, & M. Aiken, "Forecasting Bankruptcies Using a Neural Network" (under review). A copy may be obtained at cost from the authors.

(3) NeuroForecaster is a commercially available program from NIBS Ltd. (Singapore) for the development of neural networks. The program requires Microsoft Windows and was executed on an clone 80486/50 Mhz IBM compatible desktop microcomputer.

(4) The final neural net configuration used an input layer with ten input nodes, two hidden layers of six and three nodes each, and an output layer with one node ("0" for bankruptcy or "1" for non-bankruptcy). In addition, the network used a fast sigmoid transfer function and .1 for noise.

Additional details or explanatory materials are available from the authors.

(5) This example was taken from Aiken, M., L. Motiwalla, K. Fish, & M.

Bsat, "A Comparison of Neural Networks with Discriminant Analysis" (under review). A copy may be obtained at cost from the authors.

(6) The discriminant analysis was done using SPSS on an IBM 3084 mainframe.

(7) See Figure 2 below for screen output appearance.

(8) Extracted in part: Aiken, M., D. Hawley, J. Paolillo, & H. Sloan, "Using a GDSS to Increase Meeting Productivity" (Under review). A copy is available at cost from the authors.

(9) The neural network capability described could be implemented on a $1200 clone, the program itself costs only $800, so only $2000 in direct investment is involved. Training and ancillary costs (desk, space, etc.) should be considered, as well; the GDSS described costs $3,000 and does require a local area network and one terminal per participant, a condition that many businesses already meet; GNUS systems are perhaps the most demanding, but in most cases a capability can be developed for less than $10,000, but the more costly part of a GNUS application is data acquisition, and especially the labor dedicated to entry, update, and manipulation. Given the power of these applications, however, the cost-benefit test is usually quite easily met for any of these newer systems.

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A NATIONAL ANALYSIS OF THE SMALL BUSINESS ADMINISTRATION'S DEPLOYMENT OF SBI'S AND SBDC'S

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ABSTRACT

Recently the Small Business Administration attempted to eliminate the Small Business Institute program because it allegedly duplicates the services provided by the Small Business Development Centers. They neglected the different nature of the two programs, and the location of the SBI's and SBDC's relative to business activity. This paper posits that redundancy is not the entire issue. The degree to which these services are provided in the same geographic area can be explained by considering the two program missions and the degree to which the deployment of these services match population or business activity. While there does appear to be significant overlap in the deployment of SBI's and SBDC'S, more research is needed to understand the demand for these services. The evidence is displayed graphically as well as statistically.

INTRODUCTION

Mr. Erskine Bowles testified before Congress that the Small Business Institutes and the Small Business Development Centers offered redundant services and therefore the SBI's were expendable. The saving for the national budget would be only $3,000,000.

Considerable political pressure was applied by SBIDA and its friends on the members of Congress and the SBA. The administration has reversed its earlier decision and has recommitted itself to the program. This paper is relevant in the continuing debate about appropriate funding levels and efficacy of the SBI program, and could have relevance for the funding of the Service Corp of Retired Executives (SCORE).

Mr. Bowles' original conclusions and recommendations fail to recognize the obvious difference in the nature of the services provided by the three SBA programs. Also, as this paper documents, it ignores the geographic coverage of these programs in each state and region by region. Each of the SBA programs developed to meet complimentary, yet different needs and is offered through different institutional structures. This is true, even when the programs reside side-by-side on a campus.

> "SBDC/SBI Programs - counseling and assistance are offered through Small Business Development Centers (SBDC's) which are located at some colleges and universities. Through Small Business Institutes (SBI's), business students from more than 450 colleges and universities provide in-depth, long-term counseling under faculty supervision to small businesses." (SBA, 1994)

Both programs offer management consulting and technical assistance. The SBI program is first and foremost an educational program which emphasizes the provision of this service through student teams. This is both a consulting service offered to businesses and an educational program for students which is "in-depth and long-term involving a semester's work. The SBI cases average significantly more hours than do the SBDC cases.

Mr. Bowles' testimony was also in error because of the deployment of these services. It is an empirical question whether the geographic deployment of SBI's and SBDC's match the demand. This analysis reveals a modest distance between location of the two SBA programs. An average minimum distance of only 8.8 miles for the 466 SBI's located in the continental United States and the fact that all but twelve of the SBI's are within 50 miles of an SBDC is persuasive evidence of the similar coverage of these two programs. However, it does not follow that the redundancy claim is valid.

METHODOLOGY

To measure the geographic redundancy this study measured the distance between all the SBI's and SBDC'S. One measure of the overlap would be the minimum distance from each SBI to the nearest SBDC. This approach is consistent with, if not identical to a well established approach called the "nearest neighbor." (Smith, p. 235)

This project used databases at the Small Business National Center at the University of Central Arkansas and a Geographic Information System (GIS) mapping software, pcARC/Info, available through Millersville Universfty's Geo-Graphics Laboratory, to overlay the maps of each of the SBA programs. The data provided by the National Center included the Postal Zip Code for each site. A dbase application was used to convert each Zip Code to latitude and longitude. The dbase conversion and thus the mapping uses the central point of each Zip Code as the location of each program, rather than the actual site.

Figure 1

Zip Code and Distance

| | | D |

```
|      A    |                    \ C         |
|  B___    *<-------------------------------->*       |
| /    \    |                       \        |
|/       \____|                         \_______|
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This study measures the distance between the center of two Zip Codes, as illustrated in Figure 1 by the arrow. The distance may overstate the difference if the actual SBI and SBDC sites are located at points A and C, but R would understate the distance d the actual sites were B and D.

This is a reasonable compromise given the data sources available. The distortion provided by this assumption would not affect the averages discussed below. However, assuming that all SBI's and SBDC are in the center of their Zip Codes will overstate the number of programs with zero distance between the programs. To measure the difference between the mappings a statistical analysis was performed using Microsoft Excel (Copyright). (Please see Appendix One). Statistical functions used were basic descriptive statistics: mean, standard deviation, counts, minimum, maximum, frequencies.

Each is a function provided by Excel (Copyright). The distance calculated is "as the crow flies" and does not take into account any natural obstacles. The simplification caused by this assumption is a well recognized and necessary compromise in geography (Haggett, p.62). In many areas, natural obstacles, such as rivers and mountains or man-made features, such as locations of highways and other transportation make point-to-point distance less relevant. A more complete analysis would have to take into account traffic patterns, as well as population or business activity. Such an analysis is not performed here, nor does it appear that such data are available on a national scale. The average minimum distance is found after calculating the distance between each SBI and all SBDC'S. This data are presented in Table One by state, and therefore for a state the average minimum distance is the mean of the distance to the nearest SBDC for each SBI in that state, regardless of whether the closest SBDC is in that state. Service areas of SBI's and SBDC's may be complicated by regional boundaries and are not part of this analysis.

THE MAPPING

The maps of the United States and Regions I, II, III are included as Appendix Two. (Additional regional maps are available on request.) The SBA services are deployed throughout the United States, yet there does appear to be a duplication in the pattern in urban areas. In the major metropolitan areas there are a significant number of both programs. Services are duplicated in New York, Los Angeles and Chicago, which is not surprising. Duplication of services does not indicate a wasteful deployment. Adequacy of service is relative to demand. Future study will help determine whether the level of population and business activity account for such an investment in the development of SBI's and SBDC'S. In the larger metropolitan areas where there is considerable overlap of services by the two programs, it would be a mistake to argue that the programs are redundant. The SBA has established a larger number of centers and institutes because of the higher business volume. It is reasonable to conclude that in the absence of SBI programs, additional SBDC's would need to be established to handle the demand. The more suburban or rural areas of the country are more representative of the average deployment. The mappings clearly indicate a distance between the two programs.

STATISTICAL ANALYSIS

The average minimum distance to the nearest SBDC for SBI programs is 8.8 miles and the standard deviation is 15.4 miles. See Table 1.

The concentration of programs evident in the mapping, discussed above, is supported by the high number of programs with a minimum distance of less than one mile. This also results from the connection of both programs to colleges and universities. Just under half of the programs are in the "0 mile" category. Since such a significant number of the SBI's were located at the same site as an SBDC an additional statistic was calculated.

Table 1

NATIONAL STATISTICS

National AVG	8.76
National St. Dev.	15.43

FREQUENCY DISTRIBUTION

Miles	Count
0	209
1	9
5	61
10	63
20	53
50	59
75	10
100	1
150	0

200	1

The column in Table 2,"W/0 0 Mean Distance" is the mean minimum distance without including the 209 SBI's with a minimum distance of 0. The remaining 55% of SBI's , are an average of 14.37 miles from the closest SBDC.

The 209 SBI's that are at the same location as the closest SBDC are primarily located in urban centers. A county by county analysis of this information would also resolve the question of convenience for the 30% of SBI's who are on average at least 10 miles from the nearest SBDC.

The state statistics do reveal some variation, with Delaware (only one program), South Carolina and Wyoming at the lowest end of the spectrum with a zero distance, and Louisiana and Nebraska at the high end with 21.2 and 19.9 averages, respectively.

Each state has some redundancy in the urban areas. For example, an average minimum distance of twenty miles in Pennsylvania could still result in significant driving times in the suburban or rural areas. How effective is the deployment of SBA resources if "intensive, long-term" consulting is supposed to take place assuming inconvenient driving times?

Across the country there are three programs with a relatively large distances. Apparently, these are the remotest sites:

> Sul Ross State University in Alpine, TX is 160 miles to the closest SBDC. California Polytechnic State University at San Luis Obispo, CA is 91.9 miles to the closest SBDC. Clarkson University, Potsdam, NY is 68 miles from the closest SBDC.

This analysis and the information presented here needs to be extended to include an analysis of business activity and even more complicated variables, such as natural and man-made barriers. A driving time for fourteen miles, or more, can vary significantly in this region because of traffic congestion, mountains, and other natural obstacles. For example, New York state includes New York City and rural western or up-state New York. In table 2 the data are included for the state level.

CONCLUSIONS AND RECOMMENDATIONS

The SBA should be concerned with servicing small businesses throughout the country. Currently, this service is provided by two complimentary services, SBI's and SBDC'S. The SBI programs have a different mission and to a modest extent offer assistance in areas not served by SBDC'S. An average minimum distance of 8.8 miles indicates that service in areas of the country where these programs are currently deployed is convenient, but it is wrong to conclude that service would not be affected by the elimination of the SBI program. In fact, the SBA should identify areas of the most extreme scarcity and establish additional SBI programs. Such a determination is only possible by extending this project to include population and business activity factors.

Since deployment of scarce resources is the real issue, the study would be improved if it incorporated an index of business activity. State and county population or business activity data are available, but such information was not available at the Zip Code level as this study was completed. The addition of a Zip Code level data on a dimension such as business activity or even population will allow a more sophisticated critique of the deployment of programs than simple redundancy.

It is likely that even with duplication of programs the needs of small businesses, especially in the rural areas are not being met. Therefore, the correct policy response by the SBA would be to increase funding for both programs rather than to reduce or eliminate either one.

APPENDIX ONE

The formula for the difference between two points on a globe is:

Assume A = Latitude of Point A
B = Latitude of Point B
C = Longitude of Point A - Longitude of Point B
D = ArcCosine[Sin(A)X Sin(B)] + COS(A)X [COS(B) X Cosine(C)]

So, Distance = D/360 X 24,900

EXCEL Functions:

Notice that the following formula uses the Array function. It calculates the difference between 466 SBI's and the 826 SBDC, therefore it is performing 384,916 calculations.

```
Cell G3: {IF(MAX((COS(90-SBILat)*COS(90-
SBDCLat:SBDCLat)+SIN(90-SBILat)*SIN(90-
SBDCLat:SBDCLat)*COS((SBILong)-
(SBDCLong:SBDCLong))))>=1,1,MAX((COS(90-
SBILat)-COS(90-SBDCLat:SBDCLat)+SIN(90-
SBILat)*SIN(90-SBDCLat:SBDCLat)*COS((SBILong)-
(SBDCLong:SBDCLong)))))}
```

Since the function in G3 gives a cosine as an answer, cell H3 is necessary to find the internal angle, but Excel gives the answer in radians, hence the last term:

Cell H3: ACOS(G3)*180/PI()

Now, the final step is to calculate the difference in miles:
Cell 13: H3/360*24900

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FROM EXPECTATIONS TO ACHIEVEMENT: APPLICATION OF THE SITUATIONAL LEADERSHIP MODEL TO IMPROVING THE SBI PROGRAM

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ABSTRACT

This paper discusses how the Hersey-Blanchard Situational Leadership(R) model can be used to improve a Small Business Institute (SBI) Program's diagnosis of increasingly diverse students' ability and willingness to complete SBI projects. Not only is this an important issue at a conference whose theme is "Dealing With Diversity," but it is also an important issue to forward looking scholars and practitioners.

After reviewing the Situational Leadership(R) model, the paper will discuss the five key steps to implement the model by relating these steps to the typical problems faced by SBI Directors including the issues of diversity. The paper will conclude by making specific recommendations for planned development of student skills and improvement in student performance.

BASIC CONCEPTS OF SITUATIONAL LEADERSHIP(R)

Situational Leadership(R) is based on an interplay among (1) the amount of guidance and direction (task behavior) a leader gives; (2) the amount of socio-economic support (relationship behavior) a leader provides; and (3) the readiness level that followers exhibit in performing a specific task, function, or objective (Heresy & Blanchard, 1993)

According to Situational Leadership(R), there is no one best way to influence people. The leadership style a person should use with individuals or groups depends on the readiness level of the people the leader is influence, as illustrated-in Figure 1. Leadership style is the behavior exhibited by the leader as perceived by the follower(s). This behavior can be classified into the two broad categories of task and relationship behavior.

Task behavior is defined as the extent to which the leader engages in spelling out the duties and responsibilities of an individual or group. These behaviors include telling people what to do, how to do it, when to do it, where to do it, and who is to do it.

Relationship behavior is defined as the extent to which the leader engages in two-way or multi-way communication. These behaviors include listening, facilitating, and supporting behaviors.

Task behavior and relationship behavior are separate and distinct dimensions. They can be placed on separate axes of a two dimensional graph, and the four quadrants can be used to identify four basic leadership styles. Figure 1 illustrates these styles. Task behavior is plotted from low to high on the horizontal axis while relationship behavior is plotted from low to high on the vertical axis. This makes it possible to describe behavior in four ways or styles. These four quadrants can be used as the basis for assessing effective leader behavior. No one style is effective in all situations. Each style is appropriate and effective depending on the situation.

It is important to note that while task and relationship were used in their operational definitions, different words representing the same underlying definitions may be used in many different settings. For example, guidance or supportive behavior and directive or facilitating behavior, respectively, can be used in place of task and relationship behaviors. To maintain the context of this paper, professor and student will replace leader and follower; directive and facilitating behavior will replace task and relationship behaviors. Although students work in teams to complete their projects, the main focus will be on the individual student.

(Guidance)
FOLLOWER READINESS
HIGH
MODERATE LOW
<--
R4 R3
R2 R1
Able and Able but
Unable but Unable and
Willing Unwilling
Willing Unwilling
or or
or or

Confident Insecure
Confident Insecure

FOLLOWER
LEADER
DIRECTED
DIRECTED

Readiness Defined

Readiness in Situational Leadership(R) is defined as the extent to which a student has the ability and willingness to accomplish a specific task. People tend to be at different levels of readiness depending on the task they are being asked to do. Readiness is not a personal characteristic; it is not an evaluation of a person's traits, values, age, and so on. Readiness is how ready a person is to perform particular task. This concept of readiness has to do with specific situations, not with any total sense of readiness. All persons tend to be more or sell ready in relation to a specific task, function, or objective that a leader is attempting to accomplish through their efforts.

The two major components of readiness are ability and willingness.

Ability is a function of the knowledge, experience, and skill that an individual or group brings to a particular task or activity.

Knowledge-knowledge of the task
Experience-experience with or related to the task
Skill or performance-demonstrated skill and/or performance in successfully completing similar tasks.

Willingness is a function of the confidence, commitment, and motivation that an individual has to accomplish a specific task.

Confidence-the person's feeling that, "I can do it."
Commitment-the person's feeing that, "I will do it."
Motivation-the person's feeing that, "I want to do it."

Willingness is only one word that describes the issue. Sometimes, it is not so much that a person is really unwilling, it is just that the specific task has never been done before.

Perhaps the person does not have any experience with it, so the individual is insecure or afraid. Generally, if it is an issue of never having done something, the problem is insecurity.

Even though the concepts of ability and willingness are different, it is important to remember that they are an interacting, influence system. This means that a significant change in one will affect the whole. The extent to which a student brings willingness into a specific situation affects the use of present ability, and affects the extent to which the student will grow to develop competence and further ability. Similarly, the amount of knowledge, experience and skill brought to a specific task will often affect competence, commitment, and motivation.

Readiness Levels

Readiness levels are the different combinations of ability and willingness that people bring to each task. (See Figure 1). The continuum of student readiness can be divided into four levels. Each represents a different combination of student ability and willingness or confidence.

Readiness Level One (RI)

> Unable and unwilling-The student is unable and lacks commitment and motivation. OR
>
> Unable and insecure-The student is unable and lacks confidence.

Readiness Level 2 (R2)

> Unable but willing-The student lacks ability, but is motivated and is making an effort. OR
>
> Unable but confident-The student lacks ability, but is confident as long as the professor is there to provide guidance.

Readiness Level 3 (R3)

> Able but unwilling-The student has the ability to perform the task, but is not willing to use that ability. OR

Able but insecure-The student has the ability to perform the task, but is insecure or apprehensive about doing it alone.

Readiness Level 4 (R4)

Able and willing-The student has the ability to perform and is committed. OR

Able and confident-The student has the ability to perform and is confident about doing it.

The curved line through the four leadership styles shown in Figure 1 represents the high probability combination of directive and relationship behaviors. These combinations correspond to the readiness levels directly below. To use the model, identify a point on the readiness to perform a specific task. Then construct a perpendicular line from that point to a point where it intersects with the curved line representing professor behavior. This point indicates the most appropriate amount of directive behavior and facilitative behavior for that specific situation.

APPLICATION OF SITUATIONAL LEADERSHIP(R)

Use of Situational Leadership(R) model consists of five well defined and interrelated steps. These steps include:

1. What objective(s) do we want to accomplish?

2. What is the student's readiness given the situation?

3. What leadership intervention should the professor make?

4. What was the result of this leadership intervention?

5. What follow-up, if any, is required?

Each of these steps will be examined in some detail.

1. What objective(s) do we want to accomplish? The professor must first determine the task-specific outcomes a student is to accomplish. Without creating clarity on outcomes, objectives, subtasks, milestones, and so on, the professor has no basis for determining student readiness or the specific behavioral style to use for that level of readiness.

Without specific objectives, the professor will be in the same position as Alice, in Lewis Caroll's Alice in Wonderland. Alice was in dilemma and she had to ask Cheshire-Puss who was sitting in a tree for advice:

> "Would you tell me, please, which way I ought to go from here?"
>
> "That depends a good deal on where you want to get to," said the cat.
>
> "I don't care where . . ." said Alice.
>
> "Then it doesn't matter which way you go," said the Cat.
>
> ". . . so long as I get somewhere," Alice added as an explanation.

Objectives are just part of the desired road. They must be integrated with the school's vision, mission, and educational goals. As an analogy, the vision is the distant destination, the mission is roadway to the destination, and the goals and objectives are signposts along the way.

The following paragraphs present a state university business school's recently developed vision, vision summary, and mission to illustrate how course tasks and objectives can be integrated intothese broad statements of purpose.

Vision Statement

Our vision is to be recognized throughout the world as a premier regional school of business known for its success in developing productive global citizen leaders who facilitate economic and intellectual growth, wherever they live and work, and through whatsoever they contribute to society.

Vision Summary

We Develop Productive Global Citizen Leaders

Each of these words has a special meaning:

Develop: Entering students will be better prepared for their experience. This implies that we assess baseline knowledge, skills and attitudes and educate in a planned and systematic process toward stated objectives.

Productive: Students will be able to easily transition from one school to initial employment with requisite knowledge, skills and attitudes.

Global: Students will be able to understand business in an international context.

Citizen: Students will be able to understand and will be prepared to accept their obligations as responsible citizens with duties to their communities and strong ethical business practices.

Leaders: Graduates will take a proactive role in their respective careers.

Mission

We are committed to providing:

- A highly relevant curriculum, emphasizing under graduate and graduate AACSB accredited programs in business to qualified students;

- An educational experience that equips students with a strong, up-to-date business and technical foundation, and the related interpersonal and communicative skills required for productive careers.

- An equally strong, liberal education which establishes the framework for life-long learning, ethical behavior, community service, and personal development.

- A dedicated faculty devoted primarily to teaching excellence, with supporting emphasis on service and intellectual contributions which include basic research, applied research and instructional development within a global context.

- A motivating learning environment that encourages students to develop proactive leadership skills.

- A responsible educational environment with the diversity of programs and faculty to meet the needs of our primary service area.

- A range of professional development, research and services to meet the continuing educational needs of our regional business community. In making a firm commitment to educate today's students for tomorrow's success, we believe that quality and ongoing improvement are essential in all aspects of our school.

For purposes of illustration, the task specific objective to be used in the following discussion is:

> "To deliver a 10 minute oral presentation to an SBI client using an overhead projector."

Note that this objective directly relates to the communicative skills development aspect of the mission statement.

It should also be noted that there are two important differences between the objectives of an SBI course and those of a usual business course. These objectives are summarized by the expressions, "give and go" and "do and tell." In the usual course, a student "gives" an assignment to the professor. It may or may not be graded, and the student "goes" on to the next assignment. That's the end of it. No feedback, no rewriting, no attempt to meet professional standards.

2. What is the readiness of the situation? Once objectives have been created, the professor must then diagnose the student's readiness to accomplish these objectives. The key issue is: "How ready or receptive is the student to accomplish a specific objective?" If the student is at a high level of readiness, only a low amount of professor involvement will be required. If, on the other hand, the student is at a low level of readiness, considerable guidance will be required.

Why is it important to assess readiness? Because failure to assess readiness is educational malpractice. The same is true in education. Failure to diagnose the readiness of each student before prescribing educational treatment is educational malpractice. As the student populations become increasingly diverse, assignments without diagnosis will become even more inappropriate. The following statistics indicate the diversity of one state university's widening range of expectations, academic preparation, and business knowledge, skill and ability.

Based on recent data:

a. Forty-four percent of domestic undergraduate students are from minority groups with the percentage increasing, particularly Hispanic students.

b. Ten percent of all undergraduate majors are foreign students.

c. Twelve percent of all university students are stop-outs, returning, or returning transfer.

d. Eleven percent of all university students are transfer students.

e. Thirty percent of all students originate outside the University's primary service area.

f. More than fifty percent of entering upper division students transfer from junior colleges.

g. About fifty percent of upper division students have one or more parents who have never attended college.

h. Fifty-five percent of students in the School of Business are female. This diversity of ethnic, cultural and educational backgrounds raises two questions:

1. How can students learn what is expected of them to excel in the SBI Program? Should programs rely on students finding out what is expected on an informal, hit or miss basis, using sketchy information gathered from other students? Or should the programs take the initiative and develop a focused process that relates entering skills, knowledge and attitudes with desired learning outcomes so that everyone associated with the program is striving toward the same goal?

Research evidence strongly supports the value of goal directed learning (Nelson & Quick, 1994). Specific goals that are accepted by individuals as meaningful and relevant with feedback on progress lead to high performance. Concomitantly, feedback related to the readiness of an individual's ability and willingness to perform the task/accomplish the goal, is more effective than general feedback.

2. How can instructors cope with the hindering learning

attitudes that students bring with them. International students are quite forthright in complaining about domestic students. They observe that while not a majority, many domestic students have low levels of academic preparation and they don't care if they don't know very much. Another attitudinal problem is the tendency for many students to equate activity with achievement. "How can you grade this paper as a "D"; I spent 10 hours working on it". Achievement means little; activity is what counts.

A recent Wall Street Journal article may provide some clues.

Reporting on high school students who work at a nearby mall, the article notes the following:

". . . school seems to be little more than a pesky distraction from their jobs. It seems like now kids fit school around work, rather than the other way around." (Graham, 1994).

The high school principal trying to coax more academic effort out of his students, notes, "It has been the mission of parents to protect kids from any hardship, to make life trouble-free. . . the aims have been self-esteem, pleasure, happiness. Why now should these kids worry about the global economy?' (Graham, 1994).

The essence of the article is that downsizing, layoff, and other structural changes in the economy plus a desire for instant gratification have eroded the desire to prepare for an uncertain future. "Why bother" is the prevailing attitude. In this writer's state university, more than 80 percent of the students work, perhaps 30 to 40 percent of them full time.

Measuring Readiness

How does one measure readiness? A convenient way is to assess the student's ability and willingness, using the three basic criteria of each dimension: ability includes knowledge, experience and skill; willingness, includes confidence, commitment and motivation. One way of assessing readiness is to use a scale ranging from ++ representing a high degree to -- representing a low degree of the factor being evaluated. The range would by the following:

Very High (++) to Very Low (--)

Using the objective: "To deliver a 10 minute oral presentation to an SBI client using an overhead projector." This writer's typical student would be evaluated as follows:

Ability

Experience -- Very low level of experience
Knowledge - Low level of knowledge
Skill -- Very low level of skill

Motivation

Confidence -- Very low level of confidence; insecure
Commitment - Low level of commitment
Motivation - Low level of motivation

The typical student as a graduating senior would have had little or no experience in, knowledge of, or skill in delivering this type of presentation. Because of this, the student would have a low level of confidence, little commitment, and little motivation. The overall assessment of the student would be one that portrayed an insecure person of low ability. Given this what would be the professor's appropriate leadership style?

3. What leadership action should be taken? The appropriate leadership style would be one of Telling (See Figure 1) since the student has low amounts of both ability and willingness. The student needs to be given experience in delivering oral reports, knowledge of the appropriate way to deliver reports through watching appropriate models, and skill through practice. At the same time, confidence, commitment, and motivation need to be enhanced through coaching, feedback, and encouragement. Practice with supportive feedback is critical.

It is critical that the willingness component be carefully assessed. A key factor, particularly in oral reports, is insecurity. Perhaps the student has been ridiculed or made fun of during a previous attempt. Maybe the student, particularly if an international student, has never made an oral report before. Whatever the reason, insecurity is a critical factor.

An indication of potential insecurity can be ascertained if students are asked to introduce themselves during an early class period. If they appear reluctant to express themselves, or go to the front of the classroom, these are good indicators of insecurity.

4. What was the result of the leadership intervention? This step requires assessment to determine if results match expectations. Students learn in a sequence of small steps. Development is positively reinforcing successive approximations as the student approaches the desired level of performance. After a leadership intervention, the professor must assess results through rechecking the objectives, rediagnosing readiness, and ascertaining what directive and facilitating behaviors are indicated.

5. What follow-up, if any, is required? If there is a gap between present performance and desired performance, then follow-up is required in the form of additional leadership interventions; and the cycle begins again.

Additional Applications

Now that the Situational Leadership(R) model has been introduced and a brief example given that illustrate the application of the model, how can it be used in other aspects of the SBI course? Let's look at another example:

1. Objective: Participate as a member of an SBI Team in the preparation of a client-ready SBI project.

2. Readiness evaluation:

Ability

Experience -- Very low level of experience
Knowledge - Low level of knowledge
Skill -- Very low level of skill

Willingness

Confidence - Low level of confidence; insecure
Commitment + Moderate level of commitment
Motivation + Moderate level of motivation

Our student typically has never done anything as demanding as an SBI project, so the overall ability level is usually low.
Knowledge and skill are evaluated somewhat higher than the other tow factors because the student has some functional knowledge and

skill.

Confidence is more difficult to evaluate. Initially, confidence may be somewhat higher because the student thinks that this is just like another assignment, but as the realization of the magnitude of the task takes hold, insecurity increases. Commitment and motivation are assessed higher because the student would normally not be in the SBI course unless there was some desire to learn more about small business.

SUMMARY

The essence of the above discussion is that there is a process based on the Situational Leadership(R) model to not only give students the information they need to facilitate their learning, but to give them a head start on completing their projects. This suggests the following:

1. Establish meaningful and worthwhile learning objectives, related to the students' career objectives. For example, the Wall Street Journal suggests,

> Despite the globalization of companies and speed of overall change, some things will stay the same. Managers intent on rising to the top will still be judged largely on how well they articulate ideas and work with others (Hymowitz, 1989).

Articulating ideas and working with others are two main objectives of SBI Programs. The relevance of these objectives to the demands to be made on 2010 managers should be discussed with the students.

2. Share expectations for the course. In Ken Blanchard's view, failure to spell out objectives and expectations is like bowling with a sheet in front of the pins. Achievement follows expectations (Hersey & Blanchard, 1993).

3. Assess the ability and willingness of individual students through short assignments and class discussions.

4. Use the appropriate leadership style. In most instances, this will be a "Telling" style with the who, what, when, and how spelled out. This structuring approach suggests that detailed instructions, modeling of oral reports, feedback on performance,

and other patterned behavior is needed.

5. Assess results of leadership interventions. This suggests a series of "write and refine" steps. For example, sections of the SBI report should be prepared, submitted, reviewed, and discussed with the students.

6. Using additional leadership interventions. Depending upon individual and team progress, a leadership style appropriate to the level of readiness should be used. Care should be taken not to use an inappropriate style. For example, using a "Delegating" style when an individual or team needs a structured approach.

CONCLUSION

Diversity issues are increasing the likelihood of educational malpractice. As the SBI students become more heterogeneous, individual and team readiness must be diagnosed before educational prescriptions are dispensed. This paper suggests that the Situational Leadership(R) model offers a systematic approach to resolve these issues.

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SEXUAL HARASSMENT: NO IMMUNITY FOR SMALL BUSINESS

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ABSTRACT

Sexual harassment is an important issue in today's workplace, even the work environments of small businesses. This paper describes the legal status of sexual harassment and outlines the implications for small businesses. Finally, a proactive strategy for avoiding the impact of a sexual harassment claim is provided.

INTRODUCTION

Over the last several years, a significant amount of research has been dedicated to government policy issues affecting the small business community. The focus of this vein of research has included the general concern of government policy (Cook & Barry, 1993; Taylor & Banks, 1992; Dye, Carland, & Carland, 1990), resolving OSHA complaints (Scherer, Kaufman, & Ainina, 1993), defamation liability (Fenton & Lawrimore, 1992), AIDS (Franklin, Gresham, & Fontenot, 1992; Rutsohn & Law, 1991), drug testing (Ward, 1991), negligent hiring (Usry & Mosier, 1991), wrongful discharge (Aalberts & Seidman, 1993; Gomes & Morgan, 1992; Fulmer & Casey, 1990), civil rights (Kurtz, Wells, & Davis, 1993), and maternity/paternity leave (Freese, 1994; Worthington & Moss, 1989). A common thread throughout the overwhelming majority of the research is the concept that government policy does impact small business, and the impact can be significant.

Surprisingly, a related issue of concern (and one with the potential for as great, if not greater, impact) has received only minimal attention in the small business literature. This issue is sexual harassment in the workplace.

Although sexual harassment is considered a legal issue, it exhorts a human toll as well. The victims of sexual harassment suffer from fear, degradation, humiliation, self-blame, and in many cases are devalued as employees and as persons in the eyes of the harassers and, even, co-workers.

Victims of sexual harassment generally have higher absentee rates, are more prone to illness, have a higher turnover rate, and are less productive because of the harassment. Co-worker morale may also plummet, either because of the atmosphere generated by the sexual harassment or because of misguided assumptions about the job gains by the harassed victim.

Research suggests that half of all women in the workplace have endured sexual harassment at some time in their careers (Werblin, 1992) and, interestingly, only 26 percent of women who say they have been sexually harassed report the incidents (Ingrassia, 1993). However, by providing remedies and a course of action for sexual harassment victims, judges and juries, the U.S. Equal Employment Opportunity Commission (EEOC), and various state commissions on human rights have made it easier for both women and men to fight sexual harassment in the workplace (Seay, 1991). Due to the increased access to remedies, the number of sexual harassment complaints with the EEOC and various state agencies has nearly doubled, from 5,694 cases in 1990 to 10,900 cases in the first eight months of 1993 (Ingrassia, 1993).

The purpose of this paper is threefold. First, a clear description of the elements of sexual harassment will be presented. This will include the historical significance of the issue as well as new insights brought about by the Civil Rights Act of 1991. Next, the implications for small businesses will be explored. Ultimately, prescriptions for avoiding the impact of this issue will be discussed.

WHAT IS SEXUAL HARASSMENT?

Sexual harassment was first recognized as a form of sexual discrimination in the late 1970s under Title VII of the Civil Rights Act of 1964 (Brown, L.A., 1992). In 1980, the EEOC refined the interpretation of Title VII by providing specific guidelines. These guidelines defined sexual harassment as:

Unwelcome sexual advances, requests for sexual favors, and other verbal conduct of a sexual nature . . . when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, (2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting that individual, or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment (MacMillan, 1991, p. 4).

In 1986, the U.S. Supreme Court agreed that sexual harassment does constitute sex discrimination under Title VII in Meritor Savings Bank F.S.B. v. Vinson, 106 S. Ct. 2399, 477 U.S. 57 (1986). The Vinson case set the basic framework for what constitutes unlawful sexual harassment under Title VII and to what extent an employer may be held liable for sexually harassing acts by supervisors, co-workers, and other individuals who come into contact with employees in the workplace.

In Vinson. the Supreme Court determined that two types of sexual harassment are "actionable" forms of sexual discrimination under section 703 of Title VII: (1) quid pro quo; and (2) hostile work environment. Quid pro quo has often been referred to as classical sexual harassment. Hostile work environment is not easily defined and, according to the Supreme Court, should be gauged against EEOC guidelines by lower courts (Gee, Grider, Bailey, & Wesely, 1992).

Quid Pro Quo Sexual Harassment

Quid pro quo sexual harassment occurs when decisions on hiring, firing, promoting, and salary are based on an employee's submission to sexual demands. If the demands are rejected and the employee suffers adverse job consequences as a result, the employer has engaged in illegal sexual discrimination and is strictly liable for quid pro quo sexual harassment. To qualify as quid pro quo sexual harassment, the following elements must be present:

1) There must be a request or demand for sexual favors;
2) There must be an expressed or implied threat to a "tangible job benefit" related to the employee's acceptance or rejection of the sexual activity; and
3) The supervisor must be in a position to implement the threat.

Hostile Environment Sexual Harassment

The concept of hostile environment sexual harassment is much more difficult to define due to its subjective nature. Unlike quid pro quo, the victim of hostile environment sexual harassment does not have to show that tangible job benefits were directly affected. Instead, the victim must show that the verbal or physical conduct was so severe or pervasive as to create a hostile environment that negatively affected his/her ability to do the job.

The question in hostile environment cases is what standard should be applied to determine whether particular conduct or speech is "unwelcome", and whether the alleged harassment is sufficiently severe or pervasive to alter conditions of employment (Gee et al., 1992). In Vinson, the Supreme Court defined hostile environment sexual harassment as conduct making the workplace environment hostile or abusive to a reasonable person. A victim no longer has to show severe psychological injury before winning damages. While a "mere offensive utterance" would not mean liability, Justice Sandra Day O'Connor wrote for the court, that federal law would take effect "before the harassing conduct leads to a nervous breakdown" (Kaplan, 1993, p. 34).

IMPACT ON SMALL BUSINESS

Since its recognition as an actionable offense less than two decades ago, the laws regarding sexual harassment have grown to include numerous statutory and common law remedies. This development "reflects the depth of society's commitment to abolishing sexual harassment in the workplace" (Brown, B.B., 1992, p. 12). The requirements have also increased the burden placed on small business owners, who frequently are called upon to observe and control the most intimate of human behaviors in their employees. Given factors such as culture and education, which often affect the way individuals interact in the workplace, the small businessperson's task is a difficult one. Although knowledge regarding the issues of sexual harassment has increased in many larger organizations, this is not always the case with small firms.

In larger firms, this knowledge has led to the implementation of company policies, the education of employees, and the establishment of specific training programs focused on eliminating sexual harassment in the workplace. This is seldom the case within a small business. Typically, time and financial constraints have precluded most small firms from implementing policies along with education and training programs. In addition, some owners may have avoided the issue simply based on the notion that sexual harassment would not occur in our "family" business (Kirk, 1989), or that they would not harass their "family".

It is important that small business owners realize that sexual harassment is not limited to their actions alone. Actionable charges may arise due to situations between supervisors and subordinates. Further, it is even possible that charges may be brought for the actions of agents, co-workers, and even customers or clients (Nabers, 1992)--a fact which many small business owners are unaware (Winokur, 1993).

If a charge of sexual harassment is brought, several provisions of the Civil Rights Act of 1991 have interesting implications for small businesses. Three concerns that would be especially bothersome to a small business include: (1) the law's ambiguity; (2) authorization of trials by jury if requested by either party; and, (3) a prescribed maximum liability.

Regarding the ambiguity of the Civil Rights Act of 1991, few small businesses (the vast majority without in-house legal representation) will have the legal prowess to interpret the law. Most will be forced to spend the time and money (two things most do not have enough of) to obtain outside legal counsel.

The second area of concern represents further depletion of the ever-valuable resources of time and money. At the request of any party involved in a sexual harassment case, the court is obliged to provide a trial by jury. The small business owner is unlikely to have in-house counsel for this process.

Finally, and a point that should be stressed, is the disproportionate maximum liability for small firms compared to their larger counterparts. A firm, for example, that employees 15 workers could face a maximum fine of $50,000--or $3,333 per employee. A larger firm, say one with 500 employees would be limited to a maximum lose of $200,000--or only $400 per employee. In addition, it is much more likely that a fine of $50,000 would have a greater impact on a firm with 15 employees than would a $200,000 fine to a firm with 500 employees. In fact, it is very conceivable that many small businesses facing this type of penalty would discontinue operations.

There are also other characteristics of the typical small business that make this group especially vulnerable to sexual harassment claims. For instance, many small businesses lack human resource managers. Next, the legal structure of a sole proprietorship or partnership is often selected. Finally, small firms have little formal control over certain agents of the organization.

In most cases, no formal human resource office exists in small business firms. This office, for many larger companies, serves as an avenue for venting the frustration of being harassed. Without this opportunity of internally resolving the sexual harassment issue, many employees may use the court or EEOC as a first resort as opposed to a last resort. Or, as Robinson, Kirk, and Stephens (1987) suggest, when victims feel powerless, they are more likely to pursue outside recourse.

The legal structure that the small business might select could be relevant to the impact of a sexual harassment case. Many small businesses have as their Legal structure a sole proprietorship or partnership. As was highlighted by the recent ruling against a San Francisco law firm and one of its partners (Baker & McKenzie v. Rubenstein),". . . a lot of people didn't realize ... that an individual could be held liable" (Opatrny, 1994, p. 3A). If operating as a partner or a sole proprietor, the small businessperson has considerably more personal liability.

More exposure may also exist for the small business owner that utilizes considerable contract employment arrangements. Often these arrangements are made with little or no background knowledge of the contractor. Any firm (as established by EEOC guidelines) is responsible for all of its agents' actions if they create a hostile environment.

In addition to the time and financial impact as described above, there is another issue that must be explored. It is important that small businesspersons understand that sexual harassment is a power issue, not a sexual one. It violates the trust between owner and worker. It introduces the issue of sex into what should be a neutral setting. Therefore, the very cohesiveness of the organization is undermined. This, by itself, has the potential of destroying the operational effectiveness of the firm.

To this point, we have demonstrated that sexual harassment, and the ever-increasing amount of litigation that follows a charge, is a very real possibility for the small business community. Further, it has been suggested that the impact to small business may be greater than for larger organizations. In light of these findings, it is important to now provide some alternatives for smaller firms to respond to this threat.

WHAT IS A SMALL BUSINESS TO DO?

Small business owners must begin to realize that prevention is the best tool for elimination of the possibility of sexual harassment within the firm. Strong measures go a long way toward ensuring a pleasant, fair, and respectful workplace. Firms can decrease the likelihood of problems in this area by: (1) establishing clear and meaningful policies and procedures regarding sexual harassment in the workplace; (2) implementing a comprehensive training program for all personnel; (3) fairly investigating any and all complaints thoroughly; and (4) taking strong appropriate action against all violators.

Set Policies and Procedures

By proactively communicating the firm's complete intolerance of sexual harassment, a small business owner can minimize the likelihood of this issue ever arising within the company (MacMillan, 1991). The best way to accomplish this is to publish a company policy denouncing sexual harassment as unacceptable behavior and stating that offenders will not be tolerated. As with any moral issue, the tone that the owner/manager sets is crucial.

In addition to encouraging appropriate behavior, having a well documented and communicated company policy will help to form a much stronger legal defense for the firm. This is especially true in regard to hostile environment charges.

Contained within the policy and procedures of the organization should be clear guidelines regarding the administration of the complaint system. Every employee should have an unobstructed path to filing a complaint. As most studies suggest, the majority of complaints are made against supervisors and managers (MacMillan, 1991). With this in mind, it should be obvious that an effective complaint system should clearly provide that an employee has the alternative to complain directly to the owner.

Train Employees and Sub-Contractors

It is not sufficient to only have company policies and procedures posted on the organization bulletin board. It is crucial that all employees understand what constitutes sexual harassment, how the prevention program will be administered, and the repercussions for not abiding by these policies.

Every employee, either at an initial orientation or through regularly scheduled workshops, should receive comprehensive training regarding sexual harassment in the workplace. This should not only include clear explanations of the organization's policies and procedures, but also specific instructions on what constitutes sexual harassment. This training should also be provided to all individuals that serve as sub-contractors for the firm.

Investigate Complaints

The first mistake a small business owner can make is to dismiss an employee's complaint without inquiry or investigation (Nabers, 1992). It is critical that any and all complaints be carefully investigated. Failure to thoroughly investigate a claim may be seen as "tacit approval" of the harasser's activities (MacMillan, 1992). Further, thorough investigation may very well insulate the owner from potential claims made by the harasser (Robinson, Franklin, & Fink, 1993).

Take Appropriate Action

If through careful investigation a complaint is found to be warranted, the owner must be prepared to take appropriate remedial action. If the action was minor, the complainant may be satisfied with a simple apology (Brown, B.B., 1992). Other forms of remedial action include: participating in a sexual harassment workshop; a letter of reprimand; a conference with interested parties; a lateral transfer; withholding of a pay raise or promotion; suspension; or termination.

Not only should remedial action for the offender be considered when corrective action is being implemented, but "the victim is entitled to whatever has been lost, whether back-pay, promotion, a job, or anything else that is appropriate" (Robinson, Franklin, & Fink, 1993, pp. 177-78).

CONCLUSION/DISCUSSION

Sexual harassment is a fact. It is a serious problem for firms of all sizes. The potential impact to a small business, however, could be devastating. This is true in terms of financial impact if a claim is brought to court, of the cost of administering a program to prevent adverse activity, and more so in terms of the human impact to the "family".

Small business owners who opt to remain reactive rather than take a proactive stance to sexual harassment by developing and implementing company policies and educating and training personnel should be reminded of the recent case in San Francisco. The jury ordered a San Francisco law firm, Baker & McKenzie, to pay $6.9 million dollars to a past employee, Susan Rubenstein. In addition, the harasser was ordered to pay $225,000. These damages are above the maximum compensatory fine of $50,000 which was assessed against the firm (Opatrny, 1994).

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ENTREPRENEURS WITH DISABILITIES: A NEW ELEMENT OF DIVERSITY IN SMALL BUSINESS

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ABSTRACT

Diversity issues in the United States today tend to be defined in terms of gender and ethnic background. Some 47 million persons with disabilities make up a sizeable minority in our population. This paper examines the barriers faced by the disabled person in starting or running a business and the special sources of assistance which are available to them. Implications to government supported programs, non-profit associations and disabled entrepreneurs are discussed.

INTRODUCTION

Diversity issues in the United States today tend to be defined in terms of gender and ethnic background. However, some 49 million persons with disabilities make up a sizeable segment of our population (McNeil, J.M., 1993). This group probably will increase because age-related disabilities are more likely as life-spans increase.

Persons with disabilities are becoming more active in the business world thanks to the Americans with Disabilities Act of 1990, advocacy efforts by disabled groups, and advances in technology. Considerable academic attention has been paid to the employment of the disabled and how the small business owner should hire and accommodate them (Barbel, Cheek, & Lacho, 1992). On the other hand, little research has addressed the entrepreneur who has a disability (Krasner, O. & Krasner, J., 1991; Doutriaux, Krasner, O., Krasner, S., & Lerner, M. 1993).

The purpose of this paper is to examine barriers faced by the disabled person in starting or running his or her own business and to identify the special sources of assistance that are available.

Implications for government supported programs such as the SBDCS, SCORE, and the SBI, self-help organizations, and disabled entrepreneurs are presented as well as suggestions for future research.

RESEARCH METHODOLOGY

Personal telephone interviews were conducted nationwide with executives, managers, and directors of twenty-five organizations related to serving the disabled. One of the authors works in a state university related rehabilitation center and has access to directories and nationwide contacts. Other sources were recommended by interviewees. In certain cases, callbacks were made to gather additional information. Agencies interviewed sent brochures and news releases about their activities if available. In essence this is an exploratory study and information was gathered from relevant sources.

BACKGROUND

Growth of Disabled Entrepreneurs

Estimates of the number of persons with a disability who operate their own businesses are uncertain (O'Brien, January 16, 1993). Some 14.5 percent of working-age persons with a severe disability are self-employed, whereas 11.9 percent of those with a non-severe disability are self-employed. In contrast, 10.4 percent of non-disabled persons are self-employed (McNeil, 1993). Persons with disabilities are twice as likely to start their own business as compared to non-disabled persons (Association for Disabled Veterans, 1993). Overall, national figures show that 2.7 percent of state vocational rehabilitation clients became self-employed in 1992, up from 2.3 percent in 1989 (L. Mars, personal communication, July 11, 1994). In fact, according to state departments of rehabilitation in Illinois, Texas, Florida, and New York, requests for business assistance from disabled entrepreneurs have been increasing. In Texas, 503 new businesses received help, up from 365 in 1990. The National Foundation for Teaching Entrepreneurship in New York City indicates that the number of disabled entrepreneurs it has aided has increased 20 percent from 1989-1993 (O'Brien, October 8, 1993). Furthermore, in a 1988 survey of disabled veterans in Massachusetts 14 percent indicated they were currently operating their own small business. Similarly, 14.9 percent of all veterans responding were operating their own businesses (Camacho, Bowen, & Hunt, 1991). Krasner suggests that there is the potential for 200,000 disabled entrepreneurs to create new businesses in the United States (Kohout, 1994).

There are several f actors which have contributed to the growing interest in self-employment by persons with disabilities. Computers and related technology have ushered in an industrial revolution of sorts for the disabled. As equipment becomes more sophisticated and less costly, more and more disabled, including the severely disabled, can find some degree of independence and work out of their homes as well. For example, for those persons with severe mobility limitations, new computers can be operated by voice. For people without speech and who have limited mobility impairments, a computer with a video camera under the monitor can take rapid pictures of the eyeball to follow the user's commands (Finn, 1993). Using personal computers with adaptive aids, the disabled person can write, read, do research, and interact with other people (O'Brien, October 8, 1993) .

A second factor is the Americans with Disabilities Act of 1990. This federal law provides greater access to employment for the disabled. However, a by-product of the ADA is a reduction in the perception that persons with disabilities are not capable of competing in the business world. This benefit extends to persons with disabilities who prefer to be self-employed (Kohert, 1994). An extension of the ADA is the introduction of HR 794, the Americans with Disabilities Business Development Act of 1993. which would allow people with disabilities to compete for contracts and capital in the Small Business Administration's 8a and 8c minority enterprise programs.

Lastly, state departments of rehabilitation are becoming more open to helping disabled entrepreneurs (Finn, 1993). Several local, state, and regional self-help organizations have been formed during the past ten years. These include organizations such as the New Jersey Disability and Non-Profit Micro-Loan Fund, the Disabled Businesspersons Association for Disabled Veterans, and the Research Institute for Special Entrepreneurship.

BARRIERS

When individuals with disabilities attempt to launch their own businesses, they need the same components as their non-disabled counterparts: a business plan, financing, a niche in the market, and business training or experience. However, the disabled entrepreneur often starts out at a disadvantage in many of these areas and, therefore, face additional challenges or barriers.

Accommodations

One difference, which can translate into additional start up and operating costs, is the need for special accommodations in business for the entrepreneur to compensate for the disability. For example, a businessperson who is blind may need adaptive computer equipment with a large-print screen or a voice synthesizer. A wheelchair user may need to equip his or her office with a ramp, wider doors and accessible restrooms. Special equipment, the need for larger facilities, and sometimes more employees means the business may incur a higher cost of doing business. This can create a business proposal that exceeds the financial norm and results in discrimination (Miyares, U. personal communication, July 13, 1994).

Discrimination

There is the potential for discrimination in the financing process because the applicant has a disability. Disabled entrepreneurs claim that many lenders have viewed making small-business loans to them as an added risk. However, advocates argue that lending to the disabled is a better bet because they are extremely determined in the midst of adversity. (Price, 1993). Bruce McNeil, who has a mental disability and was denied an SBA loan, highlights this controversy. The SBA loan committee said that McNeil's disability had nothing to do with its decision, rather the applicant's sales projections were unrealistic. However, McNeil and others questioned the SBA's rationale and have challenged it.

Myths/Stereotypes

One of the biggest obstacles for the disabled entrepreneur is breaking through the stereotypes others have about being disabled. Entrepreneurs who are disabled must overcome false public perceptions of their capabilities (Hamilton, 1992). It is a myth that the physically disabled are, by definition, dependent. However, many have to overcome their learned dependency on income from government programs, (Kohout, 1994). Also, while some may see entrepreneurs as high risk takers, Krasner (1991) found, in fact, that entrepreneurs are low risk takers and that entrepreneurs with disabilities had the same low propensity for risk-taking as their non-disabled counterparts.

Finances

The disabled entrepreneur may be at a disadvantage in coming up with his or her own business start up money. Persons with disabilities are among one of the poorest groups in society. The 1994 Harris poll shows that about 59 percent of adults with disabilities live in households with earnings of $25,000 or less, compared with 37 percent of non-disabled adults (Taylor, 1994).

Many persons with disabilities rely on government benefits for monthly income. Concern over losing disability and Medicaid benefits can be a barrier that keep people with disabilities from entering the workforce. However, the Social Security Administration has established special incentives that allow people to try working without the risk of a sudden loss of their monthly benefits and their Medicare coverage (SSA, 1993).

Prior Business experience

Relevant business experience is important to launching a successful enterprise. While the disabled as a group are generally well educated, they often lack concrete business experience. Persons with disabilities who have a high school diploma have increased to 3 in 4 in 1994, compared with 3 in 5 in 1986 (Taylor, 1994). The proportion of adults with disabilities who have completed at least some college is about the same as their non-disabled cohorts. However, education has not meant jobs for this group. Two-thirds of working age persons with disabilities are unemployed, while the overwhelming majority (79 percent) would like to have a job (Taylor, 1994). Therefore, many disabled entrepreneurs have limited business experience. This can hinder their chances in starting their own businesses.

SOURCES OF HELP

State Vocational Rehabilitation Services Program

Each of the 50 states has a vocational rehabilitation program that provides assistance for working age persons with disabilities who meet certain financial eligibility requirements and have vocational potential. The agencies will assist clients in starting their own business, however, the policies differ from state to state. As an illustration, in Louisiana, clients wanting to start small businesses are encouraged to work with a local Small Business Development Center, where they can receive technical assistance in revising their business plan. Louisiana recently changed its policy, giving more direction to qualified clients wishing to pursue entrepreneurship. Still, agency administrators say the agency is highly selective in giving grants for equipment, initial inventory and rent, which average $10,000-$25,000. Administrators report success among those business that are funded, in part because they support very small endeavors, generally with one or a few employees, and only the most promising plans are funded (Hornsby, I. personal communication, Aug. 19, 1994).

Disabled Businesspersons Association, San Diego, CA.

This non-profit education organization provides free services for persons with disabilities already in business or who want to start their own companies. Established in 1991, the association's founder and president Urban Miyares is a disabled veteran and business owner himself. The DBA receives approximately 3,000 inquiries each year (Marmer, 1993). The association's services include: counseling, assistance with research and writing of business plans and business expansions, legal andaccounting work, linking individuals with mentors and role models in the same field. While the services are free, when a person does start his or her own business, the DBA requests that 20 percent of the employee base be people with disabilities (Marmer, 1993). Miyares also conducts business workshops for persons with disabilities, as well as for professionals, such as rehabilitation and SBA staff, who advise persons with disabilities who are going into business.

Research Institute for Special Entrepreneurship (RISE), Tucson, AZ

This non-profit, resource center, founded in 1993 by O. Jay and Steve Krasner, provides training programs, individual counseling and referral services on venture strategy, including marketing, legal and financial aspects of business. Special programs have been designed for physically disabled persons who are already business owners, executives who become disabled mid-career and disabled persons who are exploring entrepreneurship.

Micro Overflow Corp, Naperville, IL

This company sells special computer equipment to enable persons with disabilities to function in the workplace. Micro overflow designs and builds adaptive computer systems to accommodate various types of disabilities. The company also provides individual and group training on technology applications, and a diagnostic vocational exploration to determine a customer' s needs. Micro Overflow has developed an on-line bulletin board of public domain software that clients can download onto their own computers. (Dalton, D., personal communication, July 19, 1994).

Association for Service Disabled Veterans (ASDV), Stanford, CA

Established in 1986, this non-profit association of service disabled veterans who own their own businesses has 3,500 members nationwide. ASDV volunteer members conduct special training workshops on starting and managing businesses, obtaining financing and contract opportunities. The association has developed VETLINK, an on-line computer network of service disabled veterans throughout the world, to exchange information about contract opportunities, financial assistance and management development programs.

National Federation for the Blind (NFB), Baltimore, MD

The NFB has a loan fund to help vision impaired individuals establish business or get equipment to help them on the job. Since the fund was established in 1984, about 100 loans have been given at an average of $5,000 per loan. Businesses ranging from law practices to day care centers have been funded. NFB has experienced a steady increase in the number of applicants as more learn about the program (Capps, D., personal communications, Aug. 22, 1994). To apply, blind individuals must supply information about their finances, education, training, experience, and the proposed business.

The New Jersey Disability and Non-Profit Micro-Loan Fund Inc.

This unique program established in 1993 provides low-interest loans to people with disabilities and/or organizations that provide meaningful employment to persons with disabilities in an integrated work setting. The program funds qualified, for-profit, start-up businesses and business expansion. This initiative is a joint effort of the New Jersey Developmental Disabilities Council, New Jersey Dept. of Commerce and Economic Development and New Jersey Economic Development Authority. The program assists individuals in developing their loan proposals and finding suitable funding sources.

U.S. Small Business Administration

The Handicapped Assistance Loan for individuals (HAL-2) of the U.S. Small Business Administration assists disabled individuals in obtaining necessary financing for starting, acquiring or operating a small business. To qualify, applicants must be permanently disabled, own 100 percent of the venture, be active in its daily operation and management, and show that their disability keeps them from competing on a par with non-disabled competitors. An evaluation of the experience, competency, and ability of the owners and operators of the business must indicate that they can operate it successfully, and can repay the loan from business earnings.

All federal funds allocated to the HAL program have been dispersed during the last 10 years. In 1993, $12 million in loans were provided to persons with disabilities (Hammersly, J., personal communication, July, August, 1994).

Service Corps of Retired Executives (SCORE)

The SBA-sponsored SCORE program matches volunteers with small businesses that need expert advise. SCORE does not provide special programs or services for disabled persons, however, all SCORE services are open to them (Bowen, J., personal communication, July 10, 1994, August 2, 1994; Yancy, K., personal communications, July 20, 1994).

Navajo Vocational Rehabilitation Center office of Special Education and
Rehabilitation Services. Window Rock, AZ

This agency provides rehabilitation and training services for Native Americans. Most clients are recovering alcoholics. Primary training needs of small business-oriented clients are in business skills, such as finances, accounting and marketing.

Small Business Development Centers (SBDCS)

SBDCs are located in all 50 states, as well as Puerto Rico and the Virgin Islands. SBDCs' primary purpose is to provide free small business counseling and reference services to both existing small business owners as well as start-up venture. This research has revealed no special programs to specifically help the disabled entrepreneur.

The National Foundation for Teaching and Entrepreneurship (NFTE), New York City.

NFTE is a national, non-profit organization that teaches entrepreneurial skills to at-risk youths from kindergarten through high school and up to the age of 24. The program for physically and mentally disabled persons (ages 15-24) is conducted through the International Center for Disabled, New York. Some 15 disabled persons per academic semester go though an 80-hour program.

The Small Business Institute Program (SBI)

Student teams at the undergraduate and graduate level at accredited four-year colleges or universities counsel small business clients under the supervision of a faculty member. Counseling efforts focus on management problems and solutions, including market studies, business plans, accounting systems, personnel policies, production design, exporting, expansion and start-up feasibility and strategic planning. Disabled entrepreneurs are eligible for such counseling.

DISCUSSION

Implications to federal programs, non-profits, self-help organizations and the SBI program

The number of disabled entrepreneurs in the U.S. will continue to increase. Most of the business assistance provided to disabled entrepreneurs is coming from specialized self-help organizations, all relatively new. Other sources of business assistance such as the Small Business Administration, SCORE, SBDCs and the SBI program should expect to receive an increase in the number of requests for help from disabled entrepreneurs.

Providers of business counseling and training should recognize that disabled entrepreneurs have the same characteristics as those of non-disabled entrepreneurs. These include the circumstances of the decision to start a business, attitudes, and risk-propensity. Business opportunities for them are not limited by their physical capabilities but by institutional barriers, especially that of procuring funding (Krasner, O.J., & Krasner, S.L., 1991).

Those who provide business assistance need to recognize the different need levels of disabled entrepreneurs. The experienced entrepreneur who has become disabled during his or her adult life may need training in certain business areas to shore up weaknesses. Those would-be entrepreneurs who have a skill which may be marketable, but lack business experience and/or knowledge, will need a higher level of training. Lastly, the disabled entrepreneur may need special training in the technology which may allow him or her to operate a small business, e.g., how to operate a voice-activated computer. This training can be funded and provided by state rehabilitation agencies, however, collaboration is needed between the business counselor and the rehabilitation counselor in relating the technology adaptation to the client' s business.

As more persons with disabilities seek assistance in starting businesses, government agencies, non-profits and self-help organizations need to be prepared to respond to their requests for reasonable accommodations. Agencies need to become educated about the resources which are available that can enable them to provide effective services to people with special needs. Accommodations can be as simple as providing a brochure in large print for someone who is vision impaired or arranging for a sign-language interpreter to sign at a training workshop. It can also mean adding a ramp to an office or moving a service to the first floor in a building without an elevator.

For the severely disabled, the issue of accommodation may be more complex and expensive. An SBI report may have to be printed in Braille for the totally blind entrepreneur client. An issue which needs to be addressed is how far is the provider of business assistance expected to provide a reasonable accommodation.

Agencies also need to be aware of where the disabled entrepreneur can go to get special accommodations to help them in business. Vocational rehabilitation agencies, universities, disability organizations and many other entities provide access to a range of equipment and training that can help someone who is disabled get the tools needed to be self-sufficient. Funding and grants are available to assist with the cost of acquiring the needed accommodations.

Specific training programs should be provided for those agencies which deal with disabled entrepreneurs. These programs should emphasize sensitivity in dealing with them. Counselors must be aware of the needs of the disabled and feel comfortable in dealing with them. The initial contact with the disabled client will determine his or her impression of the provider. This can be accomplished through education and awareness training programs.

SBDCs, SCORE, SBI programs and other business help agencies need to collaborate and interact more with state rehabilitation agencies and self-help organizations. Awareness of each organization's services is needed. This is being done by the New Jersey Micro-Loan Fund by involving a number of agencies, especially in the evaluation of funding proposals.

Other organizations such as Chambers of Commerce, trade associations, banks, veterans groups, venture capital firms, and business incubators should be made aware of the potential of disabled entrepreneurs (Krasner, O.J., & Krasner, S.L., 1991). Collaborative efforts between these organizations and providers of business assistance should be explored.

One of the basic barriers to any entrepreneur is funding. Technical or business assistance is of little help in funding is not available. More ways need to be explored to provide money on a micro basis for the disabled entrepreneur. Pilot programs modeled after the New Jersey Micro Fund should be explored by state and local economic development agencies.

Implications for the Disabled Entrepreneur

The disabled entrepreneur should recognize that opportunities do exist in the marketplace. Numerous examples of successful disabled entrepreneurs show that they can be successful (Krasner, O.J. & Krasner, S.L., 1991; Hamilton, 1992, O'Brien, 1993, June 16; O'Brien, 1993, October 3; Finn, 1993; Price, 1993; Miyares, 1994, and Kohout, 1994). Secondly, there are many sources of business assistance from self-help non-profit organizations. Government programs such as those sponsored by the Small Business Administration and SBDCs are available and ARE becoming more sensitive to the needs of the disabled entrepreneur. State rehabilitation agencies are showing more interest in rehabilitation for running a small business rather than just for employment.

The disabled person who is desirous of starting a small business should prepare himself or herself first. Urban Miyares, president of Disabled Businesspersons Association, advises that disabled persons who want to start a business should evaluate their strengths and weaknesses, get a partner to compensate for their weakness, and write a business plan (Hamilton, 1992). One way of preparing is to get business or work experience if this is a weak area. Barriers to employment should be lessened by the Americans with Disabilities Act of 1990.

If at all possible, the disabled entrepreneur should network with traditional business groups such as trade associations, Chambers of Commerce, and local economic development agencies. If networking is not convenient because of physical limitations or transportation barriers, networking by computer is an alternative.

The disabled entrepreneur needs to recognize that a new business idea may not be feasible, especially after proper research and analysis. The fault may not lie in the entrepreneur but the lack of a market opportunity. Lastly, successful entrepreneurs with disabilities should offer themselves as role models and mentors. if possible, the disabled entrepreneur should tell his or story to the public through the media or by working with the self-help organizations that have mentoring networks.

SUGGESTIONS FOR FUTURE RESEARCH

The entire area of the disabled entrepreneur is in need of research. The two studies reported in the literature (Krasner, O.J. & Krasner S.L., 1991; and Doutriaux, Krasner, O.J., Krasner, S.L., & Lerner, M., 1993) were based on very small samples. These studies need to be replicated and extended with larger sample sizes. The issue of finding disabled entrepreneurs for research purposes could be addressed by more effective networking among the associations and programs discussed above.

The information search process of disabled entrepreneurs needs to be examined. Where do they go for help according to the business problem encounterers? What kind of information is sought out? Answers to these questions should be of help to those agencies and programs which provide business assistance. Of particular interest is the need to examine the collaborative efforts of rehabilitation agencies and business assistance programs. What is the best model for this system to work efficiently? How can banks, Chambers of Commerce and trade associations be brought into this system? Survey research is needed to determine the extent of disabled entrepreneur cases that are handled by SCORE, SBDCs and SBI directors. How do they handle any accommodation issues?

In the future, more and more SBI directors will face the situation of working with disabled entrepreneurs. We suggest a series of pilot case studies using SBI teams to provide counseling for disabled clients. These case studies could provide the SBI program with suggestions, procedures, and methods for dealing with such situations.

CONCLUSION

The motivations, needs and challenges of the disabled entrepreneur are not so different from that of his or her non-disabled counterpart. This paper has identified some additional barriers that the business persons with disabilities have to overcome, such as discrimination, acquiring special accommodations, and financing.

As technology advances, disabled business self-help groups grow, and acceptance of the disabled entrepreneur grows, it is likely that more persons with disabilities will start their own enterprises and become a new force in the business world. Programs, agencies and universities would be for specialized associations to work in conjunction with established programs.

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PREVENTING EMPLOYEE EMBEZZLEMENT IN THE SMALL BUSINESS: A CONSULTING APPROACH

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Employee theft costs U.S. businesses more than $200 billion each year. Small businesses are especially vulnerable to employee theft since internal controls are generally not examined by independent auditors and segregation of duties is made more difficult by cost and personnel limitations. This paper reports findings of a series of focus group studies aimed at identifying essential elements of strong internal control in small businesses. Focus groups were conducted at CPA firms. Participants were members of each CPA firm's professional staff. Each participant had a minimum of two years experience working with small business clients. The focus group studies, coupled with a review of the literature, resulted in a checklist that can be used by consultants in reviewing their small business clients' vulnerability to embezzlement. The checklist provides consultants a framework for recommending improvements in their clients' internal control systems.

INTRODUCTION

Employee theft and embezzlement is a problem of major proportions. Annual employee theft losses in the United States are estimated at $200 billion per year, or over $500 million per day. This estimate is more than ten times the amount lost through all other crimes combined. In banks, for example, 95 percent of theft losses are from employees while only 5 percent are from robberies and customer theft. In retail businesses, about 70 percent of theft losses are internal (Albrecht, 1991).

Employee theft and embezzlement is not confined to the United States. In the United Kingdom, KPMG Peat Marwick's fraud unit produces a regular "Fraud Barometer." In 1992 the value of fraud recorded on the barometer was 671 million, and in just the first four months of 1993 the barometer registered frauds amounting to 571 million (MacErlean, 1993).

One of the problems in dealing with embezzlement is that many business owners believe their employees, especially long-time employees, are inherently honest and can be trusted to handle business transactions without proper controls in place. However, research has found that a surprising percentage of employees are not honest. Joseph T. Wells (1990), Chairman of the National Association of Certified Fraud Examiners. said 'The notion that most people are immune to the temptation to commit fraud is probably the biggest myth of all about financial crimes' (p. 82). A 1983 U.S. Department of Commerce study concluded that about one third of all employees steal from their companies. Similarly, a common guideline in security is that 40 percent of the work force is inherently honest, 30 percent are looking for ways to steal, and 30 percent are capable of stealing given the right set of circumstances (Lary, 1988). Another study by Dunn & Bradstreet found that most employers carefully watch their new hires, but assume that long-time employees are honest. However, the typical embezzler is generally a long-time employee who has learned the company's systems and procedures and is able to devise a method to overcome them. The study further found that about 70 percent of all frauds were carried out by employees in accounting and finance (Klein, 1991). According to David Sherwin, head of the fraud unit at Ernst & Young, "Most fraud is opportunistic. The person sees a weakness in a system and takes advantage of it. It is normally done by employees who have been there for a very long time." (MacErlean, 1993, p. 43).

Small businesses are especially vulnerable to employee embezzlement. Most small firms are not audited by an independent CPA. Thus, they do not have the advantage of an annual review of the businesses' finances as a deterrent to embezzlement and accounting controls are not reviewed by an independent expert. Segregation of duties, one of the cornerstones of embezzlement prevention, is more difficult in the small business since there are fewer people to assume financial duties. According to Neal Amick, vice president of Pinkerton's, Inc., and a security services expert, ". . . losses are usually suffered by smaller companies that don't have adequate procedures for screening job applicants and auditing employee activities" (Emshwiller, 1994).

REVIEW OF THE LITERATURE

The literature generally supports six important elements of a strong system of embezzlement loss prevention. These six elements are:

> Careful pre-screening of new employees

> A written loss prevention plan

> Staying alert to changes in employee's lifestyles and in touch with their problems

> Mandatory vacations coupled with cross-training

> Proper segregation of duties in the accounting system

> Vigorous prosecution of dishonest employee

Pre-screening of new employees

There is general agreement in the literature that one of the best ways to prevent employee theft is to avoid hiring thieves to begin with. A careful background check, including contact with all former employers and a standard credit check (thieves are more likely to have bad credit) should be a minimum.

For employees who will be handling large amounts of cash or intimately involved with accounting records, an honesty test may be necessary. According to Banning Lary (1988), Executive Director of the Institute for Financial Crime Prevention, "Personnel selection inventories (PSIs) from London House, Reid, Stanton, and other companies are designed to measure such qualities as honesty, emotional stability, work habits, and values, as well as whether an applicant is likely to steal on the job . . . Batteries of various PSIs can form a powerful screening system to weed out the worst risks before they get inside and poison the work force" (p. 83).

Written loss prevention plan

A written plan is useful for two important reasons. First, the plan can be reviewed by a professional (a CPA, a security expert, or both) who can suggest improvements. It is difficult, time consuming, and probably too expensive for a professional to review a businesses' potential for employee theft without a written summary of procedures. Second, the plan will be critical if a loss occurs and the business attempts to recover from its insurance company. According to Dana Turner, credit union security consultant with Security Education Systems, 'Too much can be left open to interpretation if a plan isn't written . . . written policies can be a credit union's defense in civil suits' (Mink, 1992, p. 63).

Changes in employee lifestyles

Obviously if a trusted clerk earning $15,000 per year starts driving an exotic sports car or moves into an expensive apartment it should raise suspicions of possible fraud. But flagrant reckless spending is rare among embezzlers. Other lifestyle changes may also increase risk. According to Delaney (1993), "Employees typically steal when they are in dire financial straits, especially when a spouse loses a job or when a family member becomes sick with an illness not covered by health insurance" (p. 36). According to Mink (1992), "When a basically honest person has the desire or need to steal, lax controls provide the opportunity. There are a few other signs to watch for besides financial problems and lifestyles of the rich and famous. Watch out for employees who show personality changes, have outside business interests, abuse alcohol or drugs, or gamble" (p. 64).

Mandatory vacations

Employees who have significant cash handling or accounting duties should be required to take vacations. During vacation periods, another person should take the place of the vacationing employee and, optimally, perform all duties normally performed by that person. Most embezzlement frauds require constant and repetitive falsification of data. By having someone else perform the job of the vacationing employee, the potential for discovering embezzlement is substantially increased.

Mandatory vacations must be coupled with the cross-training of another person to handle the job of the vacationing employee. Without such training the possibility of discovering embezzlement is diminished. According to A. Clyde Levingston (1991), former Director of Internal Audit for the Florida Department of Transportation, critical control steps that should be emphasized in a strong system of internal control include the training of personnel to substitute for employees on vacation and requiring employees to take vacations. When the manager of a credit union discovered a $16,000 embezzlement he stated "We became suspicious because she wasn't willing to cross-train anyone" (MacErlean, 1993).

Segregation of duties

Segregating the duties of handling cash, recording transactions, authorizing transactions and periodic reconciliation is often considered the cornerstone of internal control. Without a proper segregation of duties, the effectiveness of other controls is substantially diminished. Engle and Dennis (1989) suggest that "Regardless of an entity's size, it is desirable that key functions be structured such that no one person is in a position to both perpetrate and conceal errors and irregularities . . . To the extent possible, different individuals should be assigned the tasks of authorizing transactions, recording transactions, maintaining custody of assets and comparing assets with the related amounts recorded in the accounting records" (p. 6).

Snyder, Broome, Kehoe, McIntyre and Blair (1991) surveyed eight partners in CPA firms and identified 42 control features essential to small business. Many of these control features involve the segregation of duties. This checklist is a handy tool for consultants who want to assess the effectiveness of a client's internal control system.

Prosecuting offenders

The literature supports the notion that embezzlers are often not prosecuted. In a small business the owner and the embezzler are generally friends and longtime coworkers. Thus, the owner may be reluctant to prosecute. Also, business owners may be embarrassed by the public admission that internal controls were too weak to prevent the embezzlement.

The literature is mixed on using prosecution as a deterrent. Snyder, Broome, Kehoe, McIntyre & Blair (1991) suggest that "Prosecution is the most powerful weapon you have to send the message that theft Will not be tolerated and that thieves need not apply" (p. 14). However, in a study of 300 bank fraud cases studied by the National Association of Certified Fraud Examiners there was "no statistically significant difference in banks that prosecuted offenders and those that didn't. . . This doesn't mean that prosecution should not be pursued, but it does mean that an aggressive position on prosecution is not necessarily adequate protection from fraud" (Wells, 1990, p. 88).

RESEARCH DESIGN

Focus group studies were conducted in three Certified Public Accounting firms. The size of each group varied from five to six participants. Participants had a minimum of two years experience working with small business clients.

The objective of the focus group studies was to identify ways in which small businesses can strengthen their internal control systems. Four open-ended questions were asked of each focus group:

1. How do you believe your small business clients could strengthen their internal control systems?

2. Can you think of a specific instance where a client's internal control system was

particularly weak? What solution did, or would, you recommend?

3. If you were to pick the three most important features of a good system of internal control, what would they be?

4. Which features of internal control are unique to small business?

The profile of the sixteen participants in the focus groups:

> Average number of years in pubic accounting: 10.1

> Range of years in public accounting: 4 - 25

> Average number of years employed in accounting: 10.3

> Range of years employed in accounting: 4 - 25

> Percentage of participants who were CPAS: 94%

Percentage of participants who classified their jobs as:

New assistant: 0%
Experienced assistant: 6%
Senior: 50%
Manager: 12%
Partner: 26%
Other: 6%

The focus group studies were conducted in three different cities in two states over a period of two months.

RESULTS

In their focus group discussions, participants identified six key elements of internal control that could help reduce the opportunity for employee embezzlement. These elements are: owner involvement, the owners example, the accounting firm's review of internal control, using creative solutions to segregating duties, timely financial reporting with ratio analysis, and using the accountant as a "mystery shopper."

Owner involvement

The business owners involvement in the accounting function was a major theme throughout all focus groups. Most participants classified owner involvement as the most important element of internal control. Participants believed that all too often owners do not pay enough attention to the accounting and bookkeeping segment of the business, causing the company's bookkeeper and other employees handling cash to believe they can get away with undetected theft.

Participants suggested that business owners do not need to be experts in accounting to be involved in the process. Simple, easy to learn accounting functions can be assumed by owners. Examples of these functions are authorizing invoices for payment, signing checks, authorizing refunds for returns or credits, and reconciling the bank account.

The owner's example

Participants believe that some of their clients set bad examples, perhaps without knowing it, for their employees. Although owners may be legally entitled to take assets out of the business for personal use, participants believe that owners should set a good example by following the same rules expected of their employees. For example, a business owner taking a few dollars out of the company's cash register to buy lunch may be legal, but it sets a bad example for company employees.

The accounting firm's review of Internal control

A written plan was one of the important elements of internal control in the literature review summarized above. Participants suggested that their clients could strengthen internal control by sharing internal control plans with their independent accountants. Since most accountants are educated in proper internal control procedures, they can often identify weaknesses in their clients' internal control systems. Participants emphasized that the cost of reviewing a client's system will be minimized by putting the plan in writing. If the accountant is required to seek out the information the cost may be prohibitive.

Segregation of duties

Participants support the literature in emphasizing the importance of segregation of duties and recognizing the problems of implementation in a small business. Several suggestions were made to help overcome this problem. In addition to the owners involvement discussed above, the independent accountant may also be an additional resource for the segregation of duties. For example, the accounting firm may reconcile the company's bank account each month, or the firm may provide skilled personnel to fill in for a bookkeeper on vacation. Delegating just a few accounting functions to an independent CPA may, in itself, provide a deterrent to embezzlement.

Participants also suggested that not all duties need be performed by someone skilled in accounting. For example, opening the mail and making bank deposits may be handled by a receptionist, secretary or clerk.

Timely financial statements and ratio analysis

Several participants emphasized the importance of timely review of financial data each month. Much can be gained, including the potential for discovering employee theft, through timely ratio and trend analysis. Examples that should trigger an investigation include a dramatic increase in the percentage of merchandise returned, a cost of goods sold ratio that looks out of line, or unusual fluctuations in administrative expenses.

The mystery shopper

One technique retail businesses use to discover employee theft at the point of sale is the "mystery shopper." A mystery shopper is hired by the business owner to act as a regular customer, observe the behavior of retail clerks, and provide feedback to the owner. Generally theft is not the only objective of the mystery shopper; owners can also get feedback on how customers are treated. Participants suggested that public accountants may provide an additional service to their retail clients by shopping at their clients' establishments and providing feedback. As a minimum, retail business owners should have someone they can rely upon to provide independent feedback at the point of sale.

CONSULTANT'S CHECKLIST

Through a combination of the literature review and the focus group studies, a checklist of internal control features was developed. After reviewing the checklist with a client, the consultant can make recommendations for improving the client's internal control system.

1. Are newly hired employees pre-screened using:
   a. Reference checks of all former employers
   b. Credit checks
   c. Honesty testing

2. Does the client have a written internal control plan? If so, has the plan been reviewed by the client's accountant?

3. Does the client monitor changes in employees lifestyles, with special emphasis on living beyond the employee's means, drug use, alcoholism, gambling and extraordinary family expenses?

4. Are employees who handle cash and accounting duties required to take vacations? Are their duties then handled by competent, well-trained substitutes?

5. Are the duties of record-keeping, custody of assets, handling cash, and reconciliation properly segregated?

6. If embezzlement has ever been found in the business, was the guilty party prosecuted?

7. Is the business owner significantly involved in the accounting function of the business? Does the owner perform at least some accounting duties?

8. Does the business owner set a good example by abiding by rules established for other employees of the business?

9. Are financial statements supplied monthly on a timely basis? If so, does the owner or the ownees independent accountant review statements for unusual items?

10. If the business is a retail sales or service business, does the owner use a "mystery shopper" to get feedback at the point of sale?

In addition to the ten questions listed above, consultants may want to use the 42-item checklist of Essential Controls for Small Business prepared by Snyder, Broome, Kehoe, McIntyre and Blair (1991). These controls are divided into categories of cash controls, payroll, investments, inventories, receivables, accounts payable, sales and property.

CONCLUSION

Data show that the risk of significant losses through employee theft is high and that the risk of loss is greater in the small business. An employee theft loss rate exceeding $500 million per day and an employee honesty rate of only 40 percent demonstrate that most businesses are at risk. The lack of certified audits and the difficulty in segregating duties causes small businesses to be especially vulnerable.

Business consultants can provide a valuable service by investigating their clients' internal control systems and recommending ways to reduce the odds of employee theft. Through a review of the literature and a series of focus group studies, key elements of internal control in a typical small business were identified. The resulting checklist, especially coupled with the checklist prepared by Snyder, Broome, Kehoe, McIntyre and Blair in their book on internal control, should give consultants a solid foundation for investigating and recommending improvement in their clients' internal control systems.

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THE RELATIONSHIP BETWEEN CHANGES IN THE CAPITAL STRUCTURE OF SMALL FIRMS AND CHANGES IN THE BUSINESS CYCLE

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ABSTRACT

This article is a study of the relationship between changes in the capital structure of 50 small firms and changes in the business cycle. Three leverage ratios were correlated to annual coincident indicators. Annual ratios and indicators were studied from 1980 through 1992. The use of debt financing by these 50 small firms showed a significant decrease over the 13 year period. This decrease in the relative use of debt was contrary to expectations.

INTRODUCTION

Small firms are an important segment of the American economy. A special report by the Wall Street Journal (1987) estimated that approximately 76 percent of the 1987 employment gains in the United States would come from firms with fewer than 500 employees. According to census data, from 1977 to 1987 small businesses accounted for 68 percent of net new job growth. From 1988 to 1990, small firms created all of the net new jobs in the economy. A Dun & Bradstreet survey showed that 90 percent of all new jobs in 1994 will be created by firms with fewer than 500 employees (Business Week, 1994). Small businesses as a share of U.S. employment are growing because the industries that are growing fastest have a high proportion of workers employed in small firms (The State of Small Business, 1992). Evidence is strong in support of the significant role of small business in the economic well being of our nation. However, an unfortunate statistic is the extremely high failure rate among small businesses.

Possible contributing factors to the failure of small firms include lack of sufficient size to achieve economies of scale, lack of market experience, poor management, and lack of adequate financing. Dickenson (1981) noted that approximately one third of new small businesses are discontinued after the first year of operation and approximately two thirds are discontinued within five years.

Since small businesses make an important contribution to the economy of our nation, and since the failure rate of new small businesses is extremely high, it is important that we obtain as much insight as possible into how small businesses manage the various aspects of their operation. One important aspect of any business is how it is financed - debt and equity mix.

The focus of this paper will be an historical study of the relationship between changes in the capital structure of small firms and changes in the business cycle. The term financial structure and capital structure are often used interchangeably (Ross, Westerfield, Jordan, 1991). So in this paper capital structure will be used to refer to debt (short and long term) and equity. Textbooks and literature in financial theory provide extensive coverage of capital structure theory - the proper mix of debt and equity. However, very little research has been devoted to the actual debt and equity mix of small businesses operating in our economy. No published research was found that addressed the specific topic of this paper.

The excessive use of debt has contributed to the failure of many small businesses (Business Week, 1990). In a study of small firms by Bradley and Saunders (1992) 25 percent of the firms studied reported that lack of capital was the major reason for going bankrupt. O'Neill and Duker (1986) found that failed small firms had greater debt loads than did surviving firms. Insight into how small firms have utilized debt and equity over time should help in planning for future development of the small business sector of our economy.

The mix of debt and equity financing practices among businesses depends to a large extent on the attitude of management and economic conditions existing at the time. Traditional guidelines suggest that alternative levels of short (long) term financing depend on managements' attitude toward the differential flexibility, cost and risk levels associated with each level. The matching principle, which states that short (long) term assets should be financed with short (long) term funds, is commonly suggested as an important guide in making financing decisions. A conservative financing strategy would be to use long term debt to finance all long term plus portions of short term needs, while an aggressive strategy would be to finance all short term plus some long term needs with short term funds. The conservative approach is typically more costly and less flexible than the aggressive approach due to the higher costs and greater commitment to long term funds (Weston & Brigham, 1993).

Small firms tend to carry a larger debt load, hence more risk, than large firms. Table 1 provides an historical perspective which shows small firms following the more aggressive approach of heavier use of short term debt financing. This practice would in turn indicate a more risky position of small firms. While there may be various reasons for the heavier use of short term debt by small firms, a common view is that small firms have fewer alternatives than do large firms in raising funds and often find that the long term debt (bonds) and equity markets are not a feasible source of funds, thus the heavier dependence on short term financing.

Given the importance of small business and the more risky conditions within which they often operate, how do small firms finance their operations over time? Additionally how does the mix of debt and equity change as changes occur in the level of economic activity? These are questions addressed in this paper. Intuitively one would expect that a strong and growing economy would lead to business expansion and a greater use of financial leverage by small firms. Baskin (1989) did find a positive relationship between financial leverage and past growth, indicating more borrowing by firms experiencing favorable investment opportunities. Small firms would likely increase their use of debt financing during economic expansion and decrease such use during economic contraction. A recent example of the latter situation was during the 1991 recession when small firms decreased their debt positions through asset sales and equity financing. Also, during the 1980's, a period of reasonably good economic growth, there was a sharp increase in debt financing in all sectors of the economy. However, during the late 1980's small businesses began to restructure their balance sheets in response to slower economic growth by decreasing their debt load (The State of Small Business, 1992). The purpose of this study was to conduct an historical analysis of how the capital structure of small firms responded to changes in the level of economic activity for the period 1980 - 1992. Expectations are that small firms would make greater use of debt during economic expansion and less use of debt during economic slowdowns.

This paper is organized in the following manner. First, research methodology is discussed. Second, an analysis of the historical data is discussed. Last, the paper presents conclusions and observations from the analysis.

METHODOLOGY

Financial statements of 50 small firms were selected from the 200 best small companies list published annually by Forbes (1990 &1992). The initial intent was to randomly select 50 firms from the list of 200 in the most recent issue of Forbes. Since this study covered the period from 1980 through 1992, many small firms were eliminated from the list because they were started after 1980 or had discontinued operations before 1992. All the qualified firms were used from the November 1992 issue and the remaining firms needed to obtain a sample of 50 were taken from the November 1990 issue. These 50 firms were not intended to be representative of all small businesses, but did provide useful insight into the capital structures of a select group of successful small firms over the 13 year period. Forbes guidelines for inclusion on its list required publicly traded U.S. firms with most recent annual sales between $5 and $350 million. Therefore the firms in this study certainly have survived the early years of high risk and some of the firms would not be considered small by some standards.

Annual balance sheets for each firm for the time period 1980-1992 were obtained from Moody's Industrial Manuals (1980-1992). This 13 year period was selected because it was long enough to indicate trends in the mix of equity and debt financing. Also, this period covered two complete business cycles: (1) January 1980-peak, July 1980-trough, July 1980-peak (2) December 1980-trough, June 1990 peak, March 1991, trough.

The index of annual average coincident economic indicators was used as the measure of economic activity. Coincident indicators usually reach their peak and trough simultaneously with business cycle peaks and troughs as reported by the U.S. Government.

Financial ratios were used to evaluate changes in capital structure. Ratios are especially useful as indicators of trends in financial position rather than as indicators of absolute financial condition at a point in time.

The current liabilities/total assets ratio, long term liabilities/total assets ratio, and total liabilities/equity ratio were computed for each of the 50 small firms for each year from 1980 through 1992. The average of each ratio for each of the 13 years was then calculated. Using the annual coincident economic indicators as independent variables and the average annual financial ratios as dependent variables, the correlation co-efficient between the two variables was calculated to determine the relationship between changes in capital structure and changes in the level of economic activity, The t-test was used to measure significance. It was anticipated that the ratios would vary directly with the coincident indicators. That is, the firms would tend to use more debt financing during an expanding economy and less debt during an economic slowdown.

ANALYSIS OF DATA

Table 2 shows the comparison of the average leverage ratios of the 50 small firms with the annual averages of the coincident economic indicators for the period 1980-1992. The period 1980-1982 was a time of relatively short term volatile movements in the economy in which two peaks and troughs occurred in the coincident indicators. For example, the economic indicators peaked in January 1980, reached a trough in July 1980, reached another peak in July 1981 and another trough in December 1982. From 1983 through June 1990, there was significant economic expansion and more economic stability with the coincident indicators reaching a peak in June 1990. The 1990 recession continued until a trough was reached in March 1991. The economy was relatively stagnant throughout 1991 and 1992. Slow economic recovery began late in 1992 and has continued to the present time - 1994. It was expected that the three leverage ratios would trend upward during economic expansion since the small firms would likely use more debt to finance expansion during the expanding economy of the 1980's. Specifically, it was expectedthat the current liabilities/total assets, long term liabilities/total assets, and totalliabilities/equity ratios would trend upward with economic expansion. The reverse was expected during a recessionary period. This reasoning is consistent with the pecking order hypothesis which suggests that firms prefer to use debt to finance expansion.

Did the information provided in this study and shown in Table 2 support the above expectations? During the years 1980-1982, which were years of considerable uncertainty with a downward trend in economic activity, the leverage ratios of these small firms did show a downward trend consistent with expectations. However, during the relatively steady growth period from 1983 through 1990, these firms showed a small increase in leverage during the mid 1980's but ended the period with significant decreases in leverage as reflected by all three ratios. The economic slowdown in 1991 and 1992 was accompanied by small decreases in the use of leverage by these firms. Also, consistent with findings from other research and Table 1 in this study, these small firms depended more heavily on current rather than long term debt.

The correlation coefficients between these three ratios and the coincident indicators for the entire period 1980-1992 showed a strong negative relationship. All correlations were significant at the .025 level. A positive correlation was expected. The periods 1980-1982 and 1992-1992 were relatively short periods in which the firms probably would not have made strategic changes that would result in significant changes in the use of leverage. The longer period from 1983-1990, which was characterized as a steady growth period, certainly gave firms sufficient time to make major decisions related to changes in capital structure. However, the firms actually decreased the relative use of debt during this period.

CONCLUSIONS AND OBSERVATIONS

The use of debt financing by these 50 small firms, as measured by the current liabilities/total assets, long term liabilities/total assets, and total liabilities/equity ratios, showed a significant decrease over the period 1980-1992. The decrease in the use of debt financing during the 1980's by these firms was contrary to expectations that during economic expansion, firms will likely increase debt financing in anticipation of expanding sales.

The time period (1980-1992) included in this study provided sufficient time and relatively stable economic conditions in which trends in financial leverage could be adequately observed. Therefore, the findings of this study concerning small firms should provide useful insight into the behaviors of small firms with respect to their management of capital structure as changes occur in economic activity. The findings in this study suggest that small firms may not follow expectations that financial leverage would increase with economic expansion. In fact, the 50 small firms in this study actually decreased their relative dependence on debt financing during the latter half of the 1980's as the economy expanded.

The findings in this study suggest that additional research is needed over longer and different time periods to help determine the validity of the results reported in this study.

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Table 1
DEBT AND EQUITY AS A PERCENT OF TOTAL ASSETS FOR MANUFACTURING FIRMS FOR SELECTED YEARS

	All Mfg.			All Mfg. with Assets Under $5 Million		
Type of Financing	1982	1987	1992	1982	1987	1992
Short Term Debt	4.9%	5.5%	6.1%	11.1%	11.6%	10.2%
Current Liab.	25.3	26.4	25.1	34.1	34.4	32.1
Long Term Debt	18.2	21.1	22.9	18.7	18.3	19.8
Total Liab.	51.5	57.1	62.7	54.4	54.4	53.8
Stockholders' Eq.	48.5	42.9	37.3	45.6	45.6	46.2

Source: Quarterly Financial Report, 1982, 1987, 1992.

Table 2
COMPARISON OF SELECTED LEVERAGE RATIO AVERAGES OF 50 SMALL FIRMS WITH ANNUAL AVERAGES OF THE COINCIDENT INDICATORS

Ratios and Indicators	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
CL/TA(1)	32.4%	28.0	27.1	25.8	25.7	26.2	26.5	26.0	25.9	23.8
LTL/TA(2)	24.5%	20.3	19.3	17.8	17.8	18.8	18.6	16.4	15.8	13.8
TL/ Equity(2)	127.2%	131.3	114.0	168.8	135.2	168.8	159.4	105.5	102.5	72.3
Coin. Ind.	102.9	107.1	100.8	102.3	113.4	117.6	120.8	124.5	129.0	132.9

Ratios and Indicators	1990	1991	1992	Cor. Coeff.
CL/TA(1)	23.7	22.7	21.3	-.66**
LTL/TA(2)	13.4	14.5	12.3	-.79**
TL/ Equity (2)	72.1	71.6	62.1	-.62**
Coin. Ind.	133.2	126.2	123.6	

**Significant at .025

(1) CL = current liabilities; TA = total assets

(2) LTL = long term liabilities; TL = total liabilities

PHASE PLANE ANALYSIS OF FINANCIAL DATA:

A NEW TOOL FOR SMALL BUSINESS MANAGEMENT

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ABSTRACT

Recent empirical studies that have examined the use of financial analysis and its effect upon small business performance have failed to demonstrate much positive correlation. This paper argues that traditional financial analysis might be inappropriate for some small businesses, and offers a different approach using a technique from nonlinear systems theory. Financial data for a restaurant are examined using both traditional techniques and phase plane analysis.

INTRODUCTION

In a recent issue of Small Business Reports, Murray (1994) outlines several financial danger signals small business owners should heed. Among these danger signals are poor profit growth and too many locked-in assets. Murray argues that many small business owners either do not understand the significance of these warnings or they tend to optimistically believe that things will get better on their own. When one combines these views with the fact that many small business owners are unable to read effectively and interpret financial statements (McMahon & Davies 1994), it becomes clear that owners would benefit greatly from an improved method of reporting and interpreting common financial data.

DISCUSSION

Accepting Murray's contention, the authors used selected financial data for restaurants from Dun & Bradstreet's Industry Norms & Key Business Ratios, 1993-94. These data were converted to monthly data and actual monthly variations were acquired from a business establishment in San Antonio, Texas. The intent was to demonstrate how an expert system using concepts from nonlinear system theory might not only alert management to the financial danger signals, but also provide suggested strategies and recommendations for action.

Like many small business owners, the proprietor of a restaurant traditionally relies on an accountant to provide summary financial data on a periodic basis. In this case, the restaurateur receives monthly reports. From the balance sheet and income statement, the proprietor calculates several ratios and compares them with past data. The ratios are then examined in an attempt to understand recent changes in the business. The proprietor must then interpret the changes reflected in the ratios and translate that information into specific management actions. The owner may decide to make no changes in the operation, or may choose to take certain actions.

We believe conventional ratio analysis such as this fails to provide the sufficient management information because it requires some sophistication on the part of the owner, it does not openly suggest useful changes for the business, and often the analysis is not timely; perhaps weeks to months old. What is needed is a type of "value added" approach to the analysis of the numbers that not only describes what is happening to the business, but also points to prescriptions that management can implement. Traditional ratio analysis does little toward this end.

To understand the problem more clearly, consider the following five months of restaurant financial data:

Table 1

Selected Restaurant Data

MONTH	FOOD COST	OPERATING MARGIN	NET PROFIT MARGIN	ROA
Dec	.36	.26	.38	1.85
Jan	.34	.34	.32	1.98
Feb	.36	.37	.27	1.83
Mar	.31	.35	.35	2.04
Apr	.341	.47	.19	1.12

Looking at the ratios in Table 1, one can tell little more than the ratios are going up or down; the cause of the movement cannot be determined. However, one might conclude that the food cost percentage improved (declining from .36 to .31) and the net profit margin improved (increasing from .27 to .35) between February and March, but both deteriorated in April. One can see that the net profit margin was lowest in April and consequently, the return on assets was also lowest in April.

The essential fact is, however, that to understand what underlies the changes in the ratios, the restaurateur must go back to the original data.

Table 2

Selected Restaurant Data

MONTH	GROSS SALES	FOOD COST	NET SALES	OPERATING EXPENSES	NET PROFIT	ASSETS VALUE
Dec	$130,560	$46,900	$ 83,660	$33,450	$50,210	$27,170
Jan	97,920	33,500	64,420	33,020	31,400	15,850
Feb	137,090	49,130	87,960	50,570	37,390	20,375

Mar	130,670	40,200	90,750	44,490	46,260	22,640
Apr	156,670	53,600	103,070	72,640	30,430	27,165

With the original data one can discover facts not apparent in the ratios. One can discover that the decrease in the food cost ratio and the increase in the net profit margin from February to March were realized even though gross sales were down. A more-than-proportional reduction in both food costs and operating expenses underlie this change. Also not revealed in the ratios is the fact that the low return on assets in April coincides with the highest monthly gross sales. A sharp increase in operating costs and an increase in total assets would appear to be the cause.

This more insightful understanding is still only descriptive of recent changes in the business. To be effective the owner must have the time and ability to conduct an analysis with at least this level of detail, and have sufficient knowledge of the business and creativity to develop strategies for improving operations of the restaurant.

NONLINEAR SYSTEMS THEORY - PHASE PLANE ANALYSIS

While a complete description of nonlinear systems theory is beyond the scope of this paper, the authors believe that the theory's phase plane analysis is of immediate use to the small business owner (Glick 1988, Priesmeyer 1992).

Phase planes plot changes in the two measures which constitute the ratios rather than the actual values of the variables. That is, they plot marginal values; the differences between each measure's value and it's value in the previous period. Obviously, changes can be either positive or negative from period to period. The center of the phase plane is coordinate 0,0 representing no change in either measure. Quadrants are traditionally numbered counterclockwise starting in the upper right quadrant.

Changes in a company's performance are depicted as an evolving change in the "state of a system" which is plotted as a trajectory on the phase plane. For example, to display a trajectory of the net profit margin ratio, points which correspond to the changes in sales and changes in profits are plotted on the phase plane incrementally. A trajectory is then produced by extending a line from each plotted point to the next one so the evolution of the system is revealed.

Using the restaurant data provided in Table 2, phase planes were generated for the food cost percentage, the operating ratio, the net profit ratio, and the return on assets.

The value of phase plane analysis becomes apparent when one compares it to the information provided by traditional ratio analysis. By itself, a ratio provides only one third the information given by a single point on a phase plane. Consider that ratio consists of two measures that are each capable of three types of behavior; increasing, decreasing, or remaining constant. Therefore, the two measures can represent any of nine fundamentally different conditions (3x3). For example, three of these conditions emerge if one measure is constant while the other increases, remains constant, or decreases. One can easily reason out the other six conditions.

However, when the two measures are combined into a single ratio the information content is dramatically reduced since the resulting ratio can only increase, decrease, or remain constant. To overcome the problem, one must examine the original data in detail as illustrated earlier in the discussion of the restaurant.

Ratios simply cannot provide a definitive representation of the changing conditions in a business, whereas phase plane analysis not only depicts the current state, but also traces a trajectory or pattern of recent changes.

INTERPRETATIONS AND PRESCRIPTIONS FOR THE RESTAURANT

Using the restaurant data again, we can illustrate the description and prescription ability of a phase plane. Recall that in March food cost was down when compared to the previous month. Analysis of these same ratios on phase planes reveals the specific changes which occur in each contributing measure. For example, the food cost percentage in Figure 1a shows that in January and March the trajectory entered the lower left quadrant (quadrant 3) reflecting decreases in both sales and food cost. Note that in March the trajectory is considerably below the origin reflecting that fact that food costs declined more than sales (a proportional increase would trace a line through the origin). The more-than-proportional decrease in food cost explains the observed decrease in the food cost percentage.

A set of appropriate prescriptions can be used to provide advice to management based on the quadrant positions. In this case, prescriptive advice such as the following could be offered:

Food Cost Percentage
Interpretation and Prescription
Quadrant 3

Interpretation: Both sales and food costs have declined from the previous period. However, the food cost percentage has improved since food costs declined at a rate greater than the decrease in sales.

Prescription: Improve sales. Current sales are highly profitable but you need additional volume to help cover operating expenses. Consider promotional strategies. Consider incurring higher food costs for increased quality or quantity to promote higher volume.

Figure 1b shows a significant increase in operating expenses in April. The trajectory moves upward sharply into the upper right quadrant (quadrant 1) reflecting more-than-proportional increases in expenses while sales increase. Appropriate interpretations and prescriptions for the operating margin in this quadrant might be as follows.

Operating Ratio
Interpretations and Prescriptions
Quadrant 1

Interpretation: Expenses have increased at a rate greater than the increase in sales. Additional profitability is being eroded by more-than-proportional increases in expenses.

Prescription: Carefully review all operating costs. Examine payroll percentage, breakage, general overhead expenses, and any extraordinary expenses. Cut these operating costs to improve profitability.

Finally, an examination of Figures 1c and 1d would confirm that both net profit margin and ROA are down for April, even though April produced the highest gross sales (lower right quadrant - 4). The interpreter could also provide prescriptions for each of these calls.

The interpretations and prescriptions available through this technique are substantially different than the type of information typically available to the small business owner. Because they are based on most recent changes in performance rather than only current performance they guide management in a more timely manner thus causing earlier discovery and intervention. These interpretations also differ in an important qualitative way from those obtained in traditional ratio analysis. Rather than reporting only the change in the ratio, they provide thoroughly descriptive explanations of the changes in the business which caused the ratio to change. Finally, because the dynamic changes in the business are mapped so specifically, appropriate prescriptions can be attached to the interpretations. Very detailed and timely prescriptions can be developed by experts in the field and made available to the small business owner automatically.

Because the interpretations and prescriptions are both business specific and based on financial data, they should be constructed by one or more people familiar with the type of business and knowledgeable of financial analysis. This might be a cooperative effort among the owner, the owner's financial advisors, and an outside consultant.

If several periods of data are available, as has been shown, the transitions in the data are presented as trajectories on the phase plane rather than as a series of one dimensional ratios. Because they report changes in the two measures rather than their actual values the phase plane image focuses attention on relative changes which might otherwise escape notice in an examination of the actual measures. There are typically subtle transitions in the data which are masked by the sheer size of the actual measures. One thing that nonlinear systems theory reveals is previously unknown structure and pattern in changes. That structure and pattern is dramatically displayed in the trajectories of interactive changes plotted on a phase plane. The patterns can also be classified and suggest a variety of other forms of analysis.

ADDITIONAL APPLICATIONS

Of significance to small business owners and consultants to small business is the fact that the phase plane interpretations used for the restaurant can be adapted to any small business. Software already exists to create phase planes (Priesmeyer 1994), or they can be created manually (see Appendix 1). The interpretations and prescriptions can be modified to focus on key ratios for any particular business.

Small businesses which operate a number of locations may find this approach useful for assisting managers at those locations. Greater efficiencies and consistency among the various locations should be possible by making such management advice and prescriptions available on a chain-wide basis. Franchisers may find this method quite useful as a service to franchisees.

The emerging field of nonlinear systems theory (also known as chaos theory) is providing a variety of applications for business practitioners. Our experience with the topic has revealed its usefulness in forecasting, quality control and production management. Its enormous potential as a financial advisor and industry specific expert system is virtually untapped. The phase plane analysis approach describe herein can be a valuable tool for small business managers or, perhaps more appropriately, consultants to small business who need a practical new tool which can simplify complex analysis into appropriate and timely expert advice.

APPENDIX I

HOW TO GENERATE A PHASE PLANE

Chaos theory is a new tool with enormous potential for organizational research and could easily become a valuable tool for business practitioners. To assist in the application of this new science, we offer the following methodology in algebraic terms below.

Step 1: Select Variables for Analysis

Choose two related values which are commonly computed as a ratio to measure the company's performance. Examples are sales, profit, accounts receivable, inventory, total assets, debt, and equity. You may also want to examine the phase plane trajectories of certain operational measures. For example, restaurant operations may want to look at the behavior of food costs.

Step 2: Compute Marginal Values for Each Variable

Limit cycle patterns are typically based on the rates of change in a system's performance. Therefore, for each variable, compute the marginal value (i.e., difference) between the observed value and its preceding value. If the data is arranged in arrays such that the first values represent the earliest observations, then the marginal values are computed as:

$$d(i-1,j)=x(i,j) - x(i-1,j)$$

where:

- d is the difference between each x and its preceding x.
- x is the value of the variable in the ith quarter.
- i is incremented from 2 to n (observations).
- j is the variable identifier.

Step 3: Plot the Limit Cycle of the Two Variables

Establish axes on a two-dimensional plane (assume the first variable is on the horizontal (x) axis and the second variable is on the vertical (y) axis). Scale these axes so that the midpoints on each one is zero. Begin at this center midpoint and extend a line to the point where x=d(i,j) and y =d(i,j+1) when i=1. Continue the process incrementing i to n-1 attaching the line to the intersection of all d(i,j) and d(i,j+1) measures.

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SMALL RETAILER VENDOR SELECTION: DO INDUSTRIAL BUYING MODELS APPLY?

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ABSTRACT

A great deal of the research in the area of vendor selection is tailored to the industrial buying process. At this level of the channel of distribution, most vendors are providing products for inputs into a production process or products/services for business use. At the retail level of the channel, most vendors are providing inventory for resale to the ultimate consumer. Therefore, the vendor selection process is inherently different. When size of retailer is considered, the selection process changes. The purpose of this paper is to examine the research done in the area of vendor selection, to present and discuss the results of a survey administered to small retailers concerning their buying practices, and to compare those results to the most commonly accepted model of industrial buying behavior.

INTRODUCTION

The industrial buying process has been extensively studied in a descriptive sense that has led to the development of several homogeneous models (Sheth 1973, Webster 1965). Webster and Wind (1972) suggested that organizational models developed for industrial buying can or should be adapted to fit the needs of retail buyers. However, logical differences in the role of buying in the retail setting, such as characteristics of the customer market and emphasis on inventory assortment, suggest the
contrary. Should retailers have to settle for a model developed for a different level of the channel?

After more than 20 years, scant research exists pertaining to the retail buying process. In the early 1980s the subject area began to attract attention (Ettenson and Wagner, 1986, Kline and Wagner 1994, Upah et. al. 1983, Wagner et. al. 1989). However, the major focus of these studies has continued to be on vendor selection just as it was in industrial buying models (Levy 1987; Mayer 1987; Wagner et. al. 1989). Other studies have suggested that retail buyers may use a decision matrix for selecting vendors (Berens 1972). In some segments that focus may be appropriate. For the most part, however, retail consumers are very subjective in their buying decisions which leads one to question whether a rational method of vendor selection is the way retail buyers actually make their purchasing decisions. Inventory is one of the major assets of a retail firm and plays a vital role in the operation and profitability of the firm. The significance of the inventory increases as the number of suppliers and stock keeping units (SKUS) increase. In light of the fact that inventory assortment is such a large part of a retail operation, do the same principles apply as to the acquisition of business supplies or raw materials at the wholesale or producer level of the channel of distribution?

Even more differences arise between industrial buying models if the size of the retailer is considered. There is a vast difference in volume between mass merchandisers or department stores and the small specialty store. As far back as 1971, Cardoza and Cagley concluded from an experimental study that industrial markets needed to be segmented into three different categories to ascertain a true picture of the industrial buying process. One of the segments suggested in their study is "the size of the buying firm, the position within the firm of the particular buyer responsible, and the personal background of the individual buyers" (Cardoza and Cagley 1971). Some of the recent studies have addressed the issue of level of experience as it relates to the retail buying process (Ettenson and Wagner 1986, Kline and Wagner 1994) but the size of the firm is an area of research that remains virtually untouched.

While larger organizations typically give a formal role to the merchandising function (i.e. specialized departments and buying centers), the importance of buying decisions is frequently discounted by the small business owner/manager (Gaedeke and Tootelian 1991). Catering to the changing needs and desires of the consuming public requires the skill and intuition of second-guessing customers. Small businesses are often resource poor; therefore, even minor miscalculation in planning, control, or merchandising decisions can be catastrophic (Shah and Mehta 1991). Many factors should be considered by retail buyers to minimize miscalculations in the purchasing process. Determining what merchandise to buy for resale involves an insight into the wants and needs of consumers in relation to product availability in the marketplace. These inputs into the buying function expand the view beyond strictly a vendor analysis. The purpose of this study is to examine a limited number of specific considerations small retailers take into account when choosing vendors and to examine some of their purchasing practices. Sheth's (1973) Model of Industrial Buying Behavior will be examined and discussed in terms of the findings of this study. Although model development is beyond the scope of this study, the comparison will help lay the foundation for the future development of a model of small retailer vendor selection.

METHODOLOGY

To determine the primary considerations and practices used in vendor selection decisions made by small retailers, a survey of small retailers in the gift industry was conducted. A pretest was performed at the Dallas Market Center during a major gift market to determine what modifications needed to made to the design of the study. Subjects in the pretest included 23 giftware buyers from various parts of the country. Although the study was designed to determine the prominent factors and influences used by buyers for small retail firms, the questionnaire was also reviewed by seven national sales managers from manufacturing firms in the gift industry and 11 manufacturers' representatives. By having the survey instrument reviewed from three different angles, we were able to eliminate ambiguity and to add any pertinent questions that had been overlooked. The input from the three levels also helped to eliminate potential bias.

Once adjustments were made, questionnaires were sent to 438 businesses located throughout East Texas, North Louisiana, and Arkansas. All of the businesses represented by the 135 respondents could be classified as small. Annual sales of 66.7 percent of the businesses were less than $250,000. The community population of 77.8 percent of the companies was less than 50,000. Trade area population was less than 50,000 for 53.3 percent. The average distance to a major city from the community in which the stores were located was 66.03 miles. The majority of the businesses, 74.8 percent, had three or less full-time employees and 67.8 percent had three or less part-time workers. Only 3.7 percent had ten or more full-time and only 5.2 percent had ten or more part-time employees. All stores in the survey sell gifts; however, some sell them secondarily to other products.

SURVEY FINDINGS

The first set of questions the respondents were asked to answer concerned the importance of various factors in their product/vendor decisions. The nine-point semantic differential scale used "not important" and "very important" as the anchors. The average ratings for each of the factors is shown in Table 1. Quality rated a full point above the next factor, price. The terms and conditions of the sale grouped together as the next most important. Of least importance to the sample were origin of the product and how long the manufacturer had been in business.

The next set of questions examined the factors influencing the retailers' buying decisions. The five-point Likert-type scale was designed to measure the relative frequency of use of the source. Table 2 depicts the results of this question. The most commonly used source of influence was reported as being customers. The type and/or extent of this influence is not clear from the questionnaire, but can be assumed to be indirect. Another important influence was business associates--partner, managers, and employees. However, 31.9 percent reported never including the manager in buying decisions. Friends and family were also not reported as being used often.

The respondents were presented with several statements describing various buying behaviors. A dichotomous scale was used to determine the percentage of respondents agreeing that these behaviors correctly described their buying styles. These percentages are shown in Table 3. The statement receiving the most overwhelming acquiescence (96.3 percent) concerned the attempt to carry unique products. Of concern should be the high percentage that reported taking inventory only for taxes (57.8 percent). Only 37.8 percent keep a perpetual inventory and 4.4 percent reported never taking inventory. Also of concern is the low percentage using open-to-buy (25.2 percent). This could be due to the fact that 21.5 percent reported not knowing how to budget open-to-buy.

The next series of questions was designed to measure the relative frequency of use of different types of vendor alternatives. As can be seen in Table 4, most respondents rely on salespeople coming to their store. They also rely heavily on purchasing from catalogs and direct from the manufacturer. A large percentage (73.1 percent) reported either never or seldom using telemarketers as a vendor.

The respondents were also asked to estimate the number of vendors from which they purchase each year. The results of this question are shown in Table 5. More than a third of the respondents reported using more than 50 vendors per year, our top category. The actual range of number of vendors is not known from this question. The respondents during the pretest did not indicate that they used many more than 50 vendors. What is clear from the responses to this question is that small retailers typically use a large number of vendors, which makes their buying function even more complex.

A major aspect of the buying function is keeping up with market trends. The results of the series of questions examining sources used in doing this can be found in Table 6. The major sources used are sales representatives visiting the store, trade magazines and trade shows. The "traditional" media--radio, television and newspapers--were heavily reported as being seldom or never used to keep up with trends.

The respondents were also asked to report the frequency with which they used various methods in paying for seasonal and everyday purchases. These results can be found in Tables 7 and 8, respectively. For seasonal purchases, the two methods overwhelmingly used were manufacturer dating programs and standard credit terms. For everyday purchases, respondents reported using standard credit terms and occasionally, COD. For seasonal purchases, only 40 percent take advantage of offered discounts on a regular basis. For everyday purchases, the percentage is 45.2.

MODEL ADAPTATION

The development of a model of small retailer vendor selection must begin with a comparison of survey results with the most commonly accepted model of industrial buying behavior (Sheth, 1973) shown in Figure 1. Based on survey results, the predominant sources of information a small retailer uses include business associates and customers. Many viewed buying as a personal decision in which no others were involved. Trade magazines were rarely used, but were heavily stressed in the industrial buying model.

Another component of the model that seems to differ in small retail situations is the buying center influence. Sheth's model recognizes that expectations of purchasing agents, engineers, users, and others play a role in the vendor selection process. The results of the current study indicate that the buying center in a small retail operation may include all employees of the business and some of its external customers. The degree to which the decision-making process will be joint or autonomous in Sheth's model depends on several product-specific factors (time pressure, perceived risk, and type of purchase) and company-specific factors (organization orientation, organization size, and degree of centralization). The product-specific factors would be very industry-specific, even in the retail operation. The company-specific factors in a small retailer organization would lead to an assumption of autonomous decision-making given fairly routine inventory purchases.

The outcome of the process is a supplier and/or brand choice. Sheth's model assumes that the process is a very formalized one with many interactions between departments in the organization. As a result, conflict resolution strategies may be necessary. However, in a small retail environment, the decision maker (owner or manager) may be making autonomous decisions that cannot be questioned. Sheth also discussed the importance of situational influences on the buying process. Some mentioned in the industrial setting include: economic downturns, strikes, machinery breakdowns, and mergers. Situational factors in the small retail environment would include local economic conditions, consumer trends, and competitive actions. Many small retailers understand the importance of these types of situational influences, as shown in Table 3.

A final consideration in the adaptation of Sheth's model to small retailers is the absence of many factors extremely important in the small retail buying situation. One factor is the role of the economic constraints of small retailers. Tables 7 and 8 demonstrate that many retailers use credit heavily for inventory purchases and rely little on personal resources. In addition, Table 3 demonstrates that many do not know basic inventory budgeting techniques, such as open-to-buy. Retailers also have a variety of different types of wholesalers from which they can purchase, whereas many industrial purchasers are assumed to be from manufacturers and/or raw materials suppliers.

The major types used are shown in Table 4. The large number of vendors reportedly being used indicates a lack of loyalty commonly seen in supplier-customer relationships. Finally, market trends are a major factor in retail inventory selection, whereas it is not even mentioned in Sheth's model. Many retailers follow market trends very closely, as is shown in Tables 3 and 6.

CONCLUSIONS

The widespread acceptance of the industrial buying model as an accurate description of all purchasing processes other than consumer has led to a complacency in theory development and research. The survey results presented in this paper emphasize the differences between small retailer buyers and industrial buyers. The development of a model to describe small retail buying behavior is beyond the scope of this paper and would be difficult to accurately theorize based on the limited sampling frame used in the study. However, the study did demonstrate that significant differences do exist and additional research into the area of small retailer buying behavior would not be a wasted endeavor.

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TABLE 1: IMPORTANCE OF FACTORS IN MAKING BUYING DECISIONS

Factor	Average Rating
Quality	8.259
Price	7.200
Shipping Time	6.570
Prepaid Freight	6.378
Discounts	6.237
Minimum Order Requirements	6.178
Exclusive Distribution	5.926
Credit Terms	5.437
Manufacturer's Minimum Stock Requirements	5.126
Made in the USA	4.948
Import Product	3.800
How Long the Manufacturer Has Been in Business	3.281

TABLE 2: INFLUENCES IN THE BUYING DECISION

Influence	Never	Seldom	Some-times	Often	Frequently
Sales Rep	0.0	11.0	52.0	25.2	11.8
Trade Magazine	5.5	23.4	50.8	15.6	4.7
Partner	23.9	12.8	18.8	22.2	22.2
Manager	31.9	5.3	14.9	22.3	25.5
Employee(s)	12.7	15.3	33.1	24.6	14.4
Family	21.0	19.4	29.8	16.1	13.7

Friends	25.8	29.2	30.8	7.5	6.7
Customers	4.8	8.7	35.7	25.4	25.4
Personal Decision	8.3	10.4	20.8	29.2	31.3

TABLE 3: TYPICAL BUYING BEHAVIORS

Behavior	Percentage
Follow Current Market Trends	63.7
Try to Carry Unique Products	96.3
Carry Lines That Competitors Have	30.4
Keep a Perpetual Inventory	37.8
Take Inventory Once a Month	7.4
Take Inventory Only for Taxes	57.8
Never Take Inventory	4.4
Use Budgeted Open-to-Buy	25.2
Buy Regardless of Open-to-Buy	44.4
Not Sure How to Budget Open-to-Buy	21.5
Comparative Shop Competition	28.1
Don't Care About Competition	28.9

TABLE 4: TYPES OF VENDORS USED FOR BUYING

Vendor	Never	Seldom	Some-times	Often	Frequently
Market	3.4	5.5	13.0	17.8	29.5
Salesperson	0.8	8.9	25.2	39.0	26.0
Distributors	8.7	23.1	34.6	21.2	12.5
Manufacturer Direct	10.8	15.7	35.3	25.5	12.7
Catalogs	5.9	14.4	34.7	27.1	17.8
Telemarketing	40.4	32.71	19.2	3.8	3.8

TABLE 5: NUMBER OF VENDORS USED EACH YEAR

Number	Percentage
Less than 10	5.9
11 - 20	22.2
21 - 30	15.6
31 - 40	16.3
41 - 50	4.4
More than 50	35.6

TABLE 6: SOURCES USED IN KEEPING UP WITH MARKET TRENDS

Source	Never	Seldom	Some-times	Often	Frequently
Sales Rep	0.8	3.3	27.0	40.2	28.7
Trade Magazines	0.8	2.3	25.6	29.5	41.9
Seminars	22.2	24.2	35.4	9.1	9.1
Newspaper	26.0	29.2	28.1	9.4	7.3
Radio/TV	13.0	30.0	31.0	17.0	9.0
Trade Shows	1.1	5.8	22.5	28.3	39.2
Comparison Shopping	5.8	28.8	26.9	22.1	16.3
Too Busy to Care	47.2	13.9	18.1	13.9	6.9

TABLE 8: METHODS USED TO PAY FOR SEASONAL PURCHASES

Method	Never	Seldom	Some-times	Often	Frequently
Manufacturer Dating Program	3.4	1.7	23.5	31.1	40.3
Standard Credit Terms	0.9	0.0	18.7	28.0	52.3
Line of Credit at Bank	57.8	17.8	15.6	4.4	4.4
Cash in Advance	42.0	48.1	23.5	2.5	6.2
COD	11.0	23.9	51.4	4.6	9.2
Pro-forma	56.0	22.7	12.0	2.7	6.7
Credit Card	57.6	28.3	13.0	0.0	1.1
Personal Resources	56.4	16.0	17.0	5.3	5.3

TABLE 9: METHODS USED TO PAY FOR EVERYDAY PURCHASES

Method	Never	Seldom	Some-times	Often	Frequently
Standard Credit Terms	0.9	0.0	10.8	16.2	72.1
Line of Credit at Bank	50.5	13.3	17.1	7.6	11.4
Cash in Advance	26.4	38.7	26.4	1.9	6.6
COD	9.5	22.4	49.1	11.2	7.8
Pro-forma	54.2	25.0	16.7	1.4	2.8

Credit Card	53.6	29.9	12.4	1.0	3.1
Personal Resources	50.0	13.3	25.5	5.1	6.1

FIGURE 1: SHETH'S MODEL OF INDUSTRIAL BUYER BEHAVIOR

```
   (1b)        Specialized      Role          Life           (4)
Information      Education      Orientation      Style       Situational
  Sources          |            |            |           Factors
                 |          \|/           |             |
--------------        -----------------------------               |
Salesmen     |                |                          |
          |    (1c)       (1a)           (1a)               |
Exhibitions  |<---Active <-- Background      Satisfaction <------    |
and Trade    |    Search    |  of the          with           |   |
Shows       |           |Individuals      Purchase        /|\  |
          |           |    |             |            |   |
          |           |  \|/             | Autonomous--  |   |
Direct Mail  |            |        (1)       |  Decisions |  |   |
          |             --- Expectations <---      /|\   \|/ |  \|/
Press       |                     of              |    Supplier or
Releases     |          --->1. Purchasing Agents--     |    Brand Choice
          |         |  2. Engineers         |               |                  /|\
Journal      |          |  3. Users           \|/   |            |
Advertising  |          |  4. Others          (2)-->|            |
          |         |               Industrial |          (3)
Professional |          |                 Buying  \|/        Conflict
and Tech-    |          |                 Process  Joint      Resolution
nical Conf.  |          |                 /|\   Decisions  1. Problem Solving
          |         |                  |     |       2. Persuasion
Trade News   |          |             ------------- ------>  3. Bargaining
          |         |           |          |       4. Politicking
Word-of-     |          |          (2a)         (2b)
  Mouth      |          |    Product-Specific   Company-Specific
          |         |        Factors        Factors
Others      |--->     (1d)          /|\            /|\
--------------      Perceptual        |            |
                Distortion        |            |
                              |            |
   -------------------------------------        ----------------------------
   |             |             |       |            |          |
  Time          Perceived        Type of  Organization   Organization   Degree of
  Pressure          Risk         Purchase  Orientation       Size   Centralization
```

MARKETING NEEDS OF SMALL MANUFACTURING: OBSERVATIONS FROM A MARKETING ASSISTANCE PROGRAM

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ABSTRACT

The importance of small firms, especially small manufacturing firms, in growing economies make their study especially relevant in present industrialized countries. One special need these firms tend to have is marketing expertise. Partly in response to such a need, Michigan Technological University's Bureau of Industrial Development initiated a Marketing Assistance Program (MAP Program) to offer affordable marketing assistance to rural manufacturing firms on Michigan's Upper Peninsula. Ten cases resulting from that program reflect manufacturers' perceived solutions to their marketing needs. These cases are reviewed and discussed in terms of needs that small, remote, manufacturing firms tend to have and assistance that might be provided.

INTRODUCTION

In noting the recent ten year history of manufacturing firms in Michigan, Jackson and Rodkey (1993) have noted, "... the birth and growth of new, small firms is a necessary ingredient for a successful market economy and is a source of job creation ..." Particularly important may be the smallest firms. Their study indicated that growth rates, as measured ten years after formation, were inversely related to size, i.e., firms starting with 1 to 5 employees had a 2.2 % per annum growth rate (p.a.r.), firms with 6 to 10 had a 1.8 % p.a.r., 11 to 50 a 1.1 % p.a.r., while firms with over 50 initial employees a 0.6 % p.a.r. Observations from their study were extended to evolving economies around the world, which suggested global implications of understanding the dynamics of small companies.

An additional observation that has a rather long history with regard to such firms is that marketing expertise is one of the critical needs of successful, growing companies. Anecdotal evidence from Apple Computer's history suggests, for instance that the presence of Steve Jobs was just as essential as the technological expertise of Stephen Wozniak and the financial acumen of Mike Markkula in moving that firm to success (Young, 1988; Cortada, 1987). Perhaps as a consequence of this example, early venture capitalists insisted that marketing expertise be present in firms that they supported financially (Malone, 1982). The necessity of having marketing expertise in small firms appears to have generality. Results from studies of SBI firms suggest that marketing may be the most important problem small U.S. firms face (Dodoe and Robbins, 1992; Tinsley and Gresham, 1989; Felham, 1985; Tinsley and Arnold, 1978).

"Marketing," of course, covers a myriad of topics -- Kotler's (1994) most recent Marketing Management text now contains 27 chapters and 801 pages. On the basis of this material, it might be expected that any firm must possess knowledge and skill in all these areas and have ongoing activities across the spectrum of topics covered in such basic texts. Studies suggest, however, that such uniform activity is not present. An American Marketing Association study (Twedt, 1983) indicated that there was a wide variation in participation in marketing activities, and industrial companies participation in various activities tended to be different that consumer companies' activities. Among small firms, Dodge and Robbins (1992) have attempted to assess the types of problems experienced as firms grow. In assessing 512 perceived problems from 364 regional SBI firms, marketing problems were the most numerous (60 percent) of those studied and were most numerous in the formation stage of firms. Further, a comparison of these two studies -- one coming from established firms, presumably large ones, and one coming from small firms suggested that small firm needs may be generally of a different nature than the AMA listing, which was specifically marketing research oriented.

The purpose of this paper is to relate case evidence of marketing expertise small manufacturing firms in a rather remote area needed, but did not possess. In each case, information came from at least a quarter's, and in most cases a year's, experience with the company. It is thought that this case evidence can contribute to understanding of the nature of small firm's marketing needs and solutions that might be developed to meet those needs.

BACKGROUND

CONCEPTUAL

Taylor and Banks (1992) have suggested that the limited resources of small firms (compared to large firms) make them more susceptible to changes in the environment. Events relatively unimportant to large firms could be critical to smaller ones. Hanks (1990) has recognized that organizations seldom change when all is going well. He asserted that it is possible, however, to proactively anticipate needed realignments in products, as well as internal configuration, thus averting stagnation and decline. It would follow that the ability to recognize opportunity is central to success (Ward, 1993). In this regard, market factors appear especially important to small firms. Among venture capitalists, marketability and marketing strategy were two of the most significant evaluation criteria listed in a study by Carter and Van Auken (1994), and market potential was the highest ranking item -- outside of management's attributes. In assessing the importance of marketplace scanning, Brush (1992) noted that research has found that a lack of marketing information (size and characteristics of market) is one of the serious problems faced by ventures. This observation was supported by the U.S. Small Business findings that "new and small ventures increasingly will have to be better informed of marketplace changes ... ."

Innovative change must be a priority for small businesses, which lack the resources of larger organizations and often base their very survival on taking advantage of opportunities that present themselves (Hartman, Tower and Sebora, 1994). In assessing the needs of current organizations Senge (1990a) has noted that leading corporations focus on generative learning, which is about creating, as well as adaptive learning, which is about coping - De Geus (1988) indicated one-third of Fortune 500 firms disappeared between 1970 and 1983; Senge (1990b) suggested that survival was associated with successful "experiments at the margin." Smeltzer et al (1991) noted that entrepreneurs frequently request advice from resources outside the firm. Their (the entrepreneurs') challenge is to select among the many advisors available - the ones necessary to his or her venture at a particular stage in its growth -- and to learn how to benefit from their counsel.

SITE SPECIFIC

The upper peninsula of Michigan is somewhat remote from continental U. S. locations. In the late 1980's and early 1990's Michigan Technological University's Bureau of Industrial Development in Houghton, MI on Michigan's Upper Peninsula administered both the Small Business Development Programs and the Community Growth Alliance Implementing Agency in the six-county Western Upper Peninsula region. The region, which had once been one of the largest copper mining centers of the world, was still very much dependent upon a forest products economy. More recently, however, a process of re-industrialization had begun and it appeared the area would be highly dependent on this re-industrialization for its long term well being.

The Bureau conducted comprehensive surveys of all Western Upper Peninsula firms twice before the program was initiated. These surveys indicated that many firms had a significant potential for increasing sales of their products, but lack of product marketing skills was a major constraint to growth. While some firms had achieved high growth rates as a result of effective marketing strategies, most firms in the region were described as conducting a "seat-of -the-pants" marketing effort -- as opposed to developing and carrying out a well conceived marketing plan. These firms often cited remote locational factors as the primary reason for their limited business success, but also indicated a desire for product marketing assistance.

The Bureau was faced with a number of constraints in meeting this need. First, while Bureau staff had been providing marketing assistance to a limited number of businesses, they tended to have neither the marketing expertise, nor the time to devote concentrated attention to a large number of businesses with individual needs. Further, the predominately small, rural companies within their territory tended to be risk adverse and unfamiliar with using external sources of marketing assistance. More importantly, most companies had limited financial resources to spend and were hesitant to spend scarce dollars when there was no guarantee of success. Other factors that somewhat inhibited success in marketing, especially in establishing relationships and alliances necessary for many industrial successes, was an adverse attitude toward sharing information with "outside" people.

The Bureau of Industrial Development designed the Marketing Assistance Program to address these constraints. Grants from the Keweenaw Industrial Council, the Michigan Department of Commerce, the Western Upper Peninsula Manpower Consortium, Michigan Consolidated Gas Company, together with in-kind assistance from Michigan Technological University were used to establish a revolving loan fund that could be used by manufacturing firms to contract for marketing assistance. The emphasis of the program was action oriented; it was set up to assist companies in taking the "next step" necessary in their business growth. The Bureau pre-qualified a marketing consultant and offered his services to individual companies to solve specific marketing problems. Participating companies paid fifteen percent of the consultant's expected costs up front; the balance of contracted costs was covered by the MAP fund and constituted a loan that would be paid back if the contract statement of work was achieved. The MAP program began as a pilot program in February 1989.

The goal of the program was to offer affordable, low risk, qualified marketing expertise to small, rural, manufacturing companies in order to increase their sales performance. This increase in sales performance, in turn, was expected to generate increased jobs and thereby expand and strengthen the base economy of the Western Upper Peninsula. The objectives of the program were to contract with at least ten companies for MAP assistance, to increase the marketing skills of Western Upper Peninsula companies, to generate new manufacturing jobs, and to create a permanent revolving loan fund for ongoing assistance in the future. All of these objectives were met (Musser 1991). The program received a national economic development award from NAMTAC in September, 1990.

METHODOLOGY

A description of the approach used in this study has been published elsewhere (Musser and Wilson, 1990; Wilson, 1993). Thus, only a brief summary of the approach used to develop these projects need be given here. Essentially, an attempt was made to interest all 56 manufacturing businesses in the six county area that comprised the Bureau's development area through a series of letters, telephone conversations, and meetings. Where interest was indicated, letters of proposal were sent that included specific tasks to be accomplished, a time period in which the tasks would be accomplished, and financial terms. These agreements were structured in contract form so that the clients knew they were entering into an expectation on their part -- both financial and in participation. A follow-up call explained the nature of these expectations.

Projects were normally contracted in a manner that provided for initial payment of 15 to 20 percent of total agreed upon cost, with the remainder due upon project completion. Three clients chose "mentor" contracts, with the remaining seven choosing "task" contracts, i.e., projects tied to specific tasks. Average contract amount was about $2,750, which was thought to be quite reasonable for the services offered. The information reported herein was developed from the formal records kept of transactions as well copious notes of meetings.

RESULTS

GENERAL OBSERVATIONS

Dodge and Robbins (1992) have suggested that major problems faced by small businesses tend to differ as these businesses go through stages in the organizational life cycle. This typology provided an approach for classifying results collected in this study. Cases have thus been organized according to the company's life cycle stage as suggested by the Dodge/Robbins study. Firms tended to fit rather reasonably in this format. Of the ten cases reviewed here, four came from late growth situations; three cases came from stable-type situations, two cases from early growth, and one case came from a formation (start-up) situation.

It might be noted with respect to these cases, company sizes tended to be very small, so marketing needs of small companies were truly being studied. The largest company involved in this study employed only 75 people; four firms employed 5 to 10 people, and the formation firm still had less than five people in its employment at the time this study was made. Employment, however, tended to follow general expectations of a life cycle model. That is, larger firms were present in the late growth and stability stages of the cycle.

As indicated earlier, seven firms opted for task-oriented contracts; three selected mentor contracts - the difference being that mentor contracts meant that principals met with the consultant quarterly during the term of the contract. The contracts thus were time based aspects of the consultant's general expertise were contracted over a one year period. Task-oriented contracts, on the other hand, held the consultant rewnsible for certain tasks that had to be completed. There was one mentor contract for firms in each of the first three stages of a life cycle typology. "Stable" firms, however, had only task related projects. Regardless of the type contract selected, it was felt that one element in success was necessary involvement of people in the businesses served - this was a program that not so much did things for these businesses, but did things with people in the firm. Thus, an opportunity for educational spin-off existed.

Before pursuing details of these cases, it perhaps is worthwhile reviewing payment descriptions. In part, they were associated with types of projects. Mentor projects carried hourly rates; task projects, in contrast, generally promised satisfaction. That is, a specified task had to be completed before a client would be billed. Also, because the costs of the complete study were underwritten by grants, sometimes payment was associated with performance as an output of the project. In case 8, for instance, complete payment was associated with a projected increase in sales for the company. In case 6, some of the payment was actually associated with a royalty schedule accompanying sale of the product. The basic intent in this approach was to get cooperative companies involved in the experience of utilizing outside resources. The MAP project bore the initial risk; it was anticipated that good projects and good faith would produce overall funds flow ior the program.

CASE OBSERVATIONS

Formation Firms -- There was one formation firm in the sample of cases collected in this sample. As might be expected from the Dodge/Robbins results, the primary concern of the individual manager involved in this case was with what would be generally considered market definition and customer contact, the first and third most frequently encountered problems by Dodge/Robbins SBI firms' in this category. It might be noted in passing that "location", Dodge and Robbins second most frequently occurring problem for this grouping of firms, was recognized as being a substantial difficulty for the individual in this case. He recognized that he probably would be a lot better off if he were located nearer an industrial setting - the Upper Peninsula setting for his business, however, was selected for perceived quality of life reasons. He would not consider moving from that location.

This firm's success was associated with special adhesive technology vested in the entrepreneur/owner/founder. Initially, a single downstate agent was responsible for steering the entrepreneur's effort toward commercially desirable applications of the firm's technology. As the firm grew, however, decisions had to be made concerning growth efforts -- on the one hand, more opponunities were available than could be considered, but on the other, perhaps the "right" opportunities were not presenting themselves for the long term viability of the firm. The owner/entrepreneur thus opted to enter into a mentoring contract in which time was spent each quarter reviewing past efforts and future possibilities. In all, the firm appeared successful during the period of coverage and eventually an SBI study was done to follow-up on one local opportunity that had presented itself.

Early growth-Firms - Two projects were obtained with firms in an early growth stage in the organizational life cycle. One was a mentor contract with a family-owned, wood products firm. Here again the owner/entrepreneur wished to periodically discuss situations that presented themselves with someone "who knew a little more about marketing than he did." Although these situations also tended to be expansion oriented, but to be of a different nature than the situations discussed with the formation firm. The early growth firm's situations centered around identifying/contacting potential reps and utilizing promotion possibilities - in particular, trade shows and advertising brochures.

The other firm in this category was a family-owned food processor that had been founded by a father, but recently taken over by a son. It participated in the one project that had some commonality in this program. A focus group study was developed for three food processors in the area. They shared a common situation where sales of core products were tending to decline. The study indicated that although individuals native to the area tended to be loyal to local products, individuals moving in tended to be unaware of them and were more loyal to national brands. Each processor developed their own campaign on the basis of this information, and this firm entered into a subsequent contract associated with a promotion campaign.

Late Growth Firms - There were four cases developed from firms classified in a late growth category of an organizational life cycle.

The mentor case in this grouping was associated with a diversified textile products producer who was moving into a stage in his business where promotion was perceived as being potentially more important in his growth. In the initial interview phase of the program solicitation, some information was supplied that the owner/manager thought potentially valuable. He thus contracted to continue the relationship throughout the rest of the year in a manner specified by available mentor contracts.

There was also a participant in the cooperative focus group study described previously. The participant in this grouping essentially went along with a program designed primarily for another participant, who had the similar situation developing -- potentially slippage of sales in core products. Growth opportunities existed, however, if newer residents could be attracted to these products. The participant evidently was sufficiently satisfied with the initial program to contract for additional work. A subsequent campaign was developed to promote sales in a distinct geographic segment; payment in that instance was tied to specific sales increase objectives.

The other two cases proved to be somewhat different from any of the other cases in this study. The one was associated with a successful special chemical firm. It was looking for assistance in finding uses for a byproduct of its operations and preparing a venture plan for entry into such businesses that developed. These tasks were contracted on phase 1/phase 2 basis. Phase 1 was paid for on a flat-rate, satisfactory performance basis; payment for phase 2 was associated with royalty payment from subsequent sales with a $10,000 maximum exposure for the firm. Likewise, the last case had its distinct nuances. An entrepreneur had put together machine shop capabilities to supply a line of specialty components, which were outlet in large quantities through major distributors. The owner/manager sought information on where major purchases might be going - with the idea of perhaps doing some direct sales. He also sought pricing intelligence, the only individual in the sample to specifically seek this information. His impression was that he "was leaving money at the table" - he was uncomfortable in consistently winning competitive bids on a cost-plus approach to bidding. A telephone survey was thus scripted, conducted and followed up with written promotional material to attractive segments.

Stable Firms -- Three cases came from firms classified in a "stable" condition. The third cooperative firm in the focus group program was in this grouping. In this case, the participant followed up the focus group observations with projects promoting the quality of his product and with some sales training.

The other two cases came from firms that might be considered in "turnaround" situations in which they each were attempting operational turnarounds (Hofer, 1980). One firm had a rustic furniture product line and had lost a major distributor. It therefore was seeking other possible distributors and approaches that might be made. A listing of existing reps was thus supplied and written copy that could be used in a direct solicitation of their assistance. The other firm solicited more comprehensive assistance. It was a combination renovator/equipment supplier, which had lost a bid to become a major regional franchiser. The owner/manager thus took this opportunity to prepare a marketing strategy and solicit advice in promotion key products and key accounts.

SUMMARY OBSERVATIONS

Three summary observations might be made from these ten cases. First, the nature of these cases might be considered. It was the authors' judgement that firms tended to take advantage of this chance to purchase marketing assistance to deal with a specific opportunity the firm had. Even the mentor projects tended to be upbeat, or opportunity, oriented. With due regard to statements such as, "one man's problem is another's opportunity," that suggests that "problems" and "opportunities" are really synonyms, at least eight of the cases tended to be opportunity oriented. Only the last two cases might be considered severe problems for the firms -- where inaction would have had a serious detrimental impact on the business. In each of these situations, participants tended to prefer a task/project orientation to program development. One might therefore suspect that participants were acting very rationally. They looked at an opportunity, developed some sense of what it might mean for them, looked at project costs, and contracted for projects that seemed favorable. On the other hand, when mentor contracts were selected they tended to be used by firms in the earlier stages of the organizational life cycle -- this observation also makes sense because firms in these stages perhaps must process much more information and perhaps more quickly as they define their operations and their markets.

Second, some definite trends appeared to develop in types of assistance that was contracted. In each case (10/10), some element of customer contact was desired. Situations varied, of course. Sometimes it was location of reps, sometimes a promotion campaign, but invariably some element of this service was desired. The other situation that seemed to be present was market assessment/definition, where eight of the ten firms contracted for assistance. In a number of cases, this step preceded customer contact in kind of an analysis/reaction type service provision. These elements also were the two major marketing problems found in the Dodge/Robbins study. Other elements observed in these cases were market planning (4), expansion (4), and pricing (1). These results are summarized in the Dodge/Robbins format in Table 1. It might be noted that there has been further simplification/truncation of the Dodge/Robbins listing of seven "problems" down to five in this study.

Finally, it might be noted that although individually oriented, the services that were contracted were not exceptional -- focus group studies, rep identification, market characterization, recommendations on ad copy, etc. Comparison with the AMA study suggests that these type activities were conducted by a majority of industrial firms over ten years ago.

DISCUSSION

The purpose of this paper was to relate some case evidence of marketing expertise small manufacturing firms needed, but did not possess. In a general sense, it was observed that firms in this study needed assistance in taking advantage of opportunities that were presented to them. These opportunities were rather company specific, as might be expected due to the rather wide range in industry participation, firm size and stage in an organizational life cycle. Nevertheless, the types of considerations tended to be consistent with the study of Dodge and Robbins (1992). Specifically, in both studies customer contact and market assessment/definition were the two top needs specified by firms. This result might also have been expected insofar as both studies were small firm oriented. It might be noted, however, that the Dodge/Robbins study was careful not to claim generality -the sample was geographic specific and thus not random. The corroboration by these results, thus, support a more general application of the earlier research.

It also would appear that results tend to suggest that agreement exists with some present observations on firm learning and survival. That is, firms in this study tended to illustrate both adaptive and generative types of learning (Senge, 1990a). The "mentor" contracts common to firms in the earlier stages of the organizational life cycle could be interpreted as a coping type behavior, i.e., adaptive learning. The project type contracts, on the other hand, could in most cases be considered generative -- the attempt to find ways to grow from the present base. Additionally, the very nature of contracts that were negotiated could be considered as evidence that small firms, as well as large ones, will "experiment at the margin" (Senge, 1990b) in an attempt to survive.

The contribution that this study might make as exploratory research is the observation that the specific marketing needs of small firms are not exceptional. In fact, the capabilities required are rather like the same things larger firms do routinely and can be conveniently supplied by a consultant. They tend to be opportunity oriented, however, which might suggest that lack of certain marketing skills may retard growth of small firms, at least small manufacturing firms. If capabilities are to be provided by individuals outside the firm, it might be noted that a task/project orientation appeared preferred in this study --especially among late growth and stable firms. Further, among small, rural manufacturing firms at least, some element of customer contact appears almost certainly to be involved -- perhaps preceded by market assessment/definition in a stage one/stage two study. It would appear that these services could be provided generally by programs such as described here, which would provide a healthy platform for survival and growth in rural areas.

CONCLUSIONS

Detailed analysis of specific projects suggest the marketing needs of small manufacturing firms tend to be much the same as those of large firms. They can be specified in instances where opportunities or problems arise, and frequently appear associated with customer contact and marketing assessment/definition. External programs can be developed to satisfy these needs, and some elements of a private/public cooperative example have been reviewed.

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	Formation	Early Growth	Late Growth	Stability	No. Situations
Customer Contact	1 - Mentor	2 - Mentor 3 - Task(2) 6 - Task 7 - Task	4 - Mentor 5 - Task(1) 10 - Task	8 - Task 9 - Task	10
Market Assessment/ Definition	1 - Mentor	3 - Task(1) 5 - Task(2) 6 - Task 7 - Task	4 - Mentor 9 - Task 10 - Task	8 - Task	8
Location	------	------	------	------	------
Market Planning	1 - Mentor	2 - Mentor	6 - Task	10 - Task	4
Pricing	------	------	7 - Task	------	1
Expansion	1 - Mentor	2 - Mentor 3 - Task(2)	5 - Task(3)	------	4
Other	------	------	------	------	------

Table 1 - Situations Observed in MAP Study in Dodge/Robbins Format
Task (1)/Task(2) nomenclature used when separate tasks were defined.)

AWARENESS OF EXPORT ASSISTANCE PROGRAMS AMONG MINORITY-OWNED SMALL BUSINESSES: AN EMPIRICAL STUDY

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ABSTRACT

The purpose of this study is to determine the extent to which minority-owned small businesses are aware of the various programs, services, and/or government agencies that have been designed and state governments in order to assist American firms in their efforts to initiate or expand their foreign trade involvement. It was found that the awareness among minority-owned small firms regarding existence of such programs is a function of the extent of their current involvement in exportation. Active exporters, as a group, tend to be more aware of existence of various governmental assistance services than are marginal exporters and non-exporters.

INTRODUCTION

In 1970 export sales accounted for only 4.3% of the United State's GNP. By 1988 export share of the GNP had more than doubled, climbing to 9.5% (Jan, 1990). Also, U.S. exports doubled since 1985 to $422 billion in 1991, accounting for much of the county's economic growth between those years (Moore, 1991). Despite these positive trends, the ratio of U.S. EXPORTS to GNP is far below that of the country's major rivals in the global economy. For example, for the United Kingdom and Germany, exports amount to approximately 20 percent of GNP.

It is also important to note that relatively few large multinational companies account for a disproportionately large amount of the U.S. export revenues. For instance, in 1988 approximately 1 percent of the U.S. companies accounted for 86 percent of the exports (Ali & Swiercz, 1991). Contrary to Europe and the Far East where small companies have regularly participated in export markets, in the U.S., relatively few small- and medium-sized firms actively export. Small businesses manage only about 10 percent of the total U.S. exports, and of those that do export foreign sales represent less than 10 percent of their total revenues (Kathawala, Judd, Monipallil, & Weinrich, 1989). These statistics seem to indicate there must be an enormous untapped economic opportunity and growth potential especially for small firms in the area of international trade.

In the recent years, U.S. small businesses have been the of economic growth and job creation. Firms employing 500 or fewer workers accounted for 3.2 million new jobs between 1988 and 1990 when big businesses had a net loss of 500,000 jobs (Business Week, 1993, p. 114). More than 36 million Americans are employed by businesses with fewer than 100 employees. Given the crucial role that small firms play in the vitality of the U.S. economy, identifying and reducing what causes their lack of enthusiasm for exportation may have significant consequences at the national level. Efforts to increase export revenues of small businesses not only could bolster their own growth and prosperity, but also would create new employment opportunities for the American worker, help reduce the U.S. trade deficit, increase the tax base at all levels of the government and consequently, improve the social and economic welfare of the entire nation. These potential social and economic contributions will be especially positive and more significant if they result from the increasing export of minority-owned firms. This is so because of the greater presence of these businesses in inner cities and in communities with more severe and chronic unemployment problems.

Given that small businesses have limited resources and international expertise, it seems reasonable to assume their apparent laid-back attitude toward exporting must be in part a function of their lack of pertinent information on logistical, market-related, and competitive aspects of foreign trade (Ali & Swiercz, 1991; Brooks & Frances, 1987; Hester, 1985). If so, it is quite possible that availability of information on such strategically important issues as foreign markets, trade opportunities abroad, characteristics of foreign competitors, foreign standards, export documentation and licensing requirements, foreign trade laws, governmental financial support and tax incentives would go a long way in prompting greater interest in exporting on the part of such firms.

It is intriguing, however, that more than a few government agencies and government sponsored programs and services do in fact exist with the function of providing businesses with the types of information mentioned above. Could the problem then partly lie in the lack of awareness among small businesses (minority-owned small business, in particular) regarding the existence of such governmental export assistance/promotion programs and services? It is in the pursuit of an answer to this exact question that this study was designed. Specifically, the purpose of this study is to determine the extent to which minority-owned small businesses are aware of, let alone take advantage of, the various programs, services, and/or agencies that are designed by the federal and state governments. This will assist American firms in their efforts to initiate or expand their foreign trade activities. It is expected that firms' awareness of available support services is a function of their current extent of involvement in exporting. As such, the study also explores the differences in awareness across the three subgroups of active exporters, marginal exporters, and non-exporters, as defined by Sharkey, Lim, & Kim (1989).

METHODOLOGY

The data for this study was obtained through a questionnaire survey. The research sample was drawn from minority-owned small businesses in the Midwest. Try Us '93: National Minority Owned Directory was used to identify minority owned small businesses in the Midwest whose products,/services were judged to be exportable. In all, 55 businesses with average annual sales of over $2 million participated in the study and provided useable responses to the survey. The number of employees for the participating firms ranged from 2 to 138, with an average of approximately 31. The average length of business experience for these firms was approximately 16.5 years.

The survey questionnaires were addressed to the presidents and/or owners of these firms. They were asked to first characterize their businesses as either a non-exporter, a marginal exporter (occasional exporting, or export sales less than 5% of revenues), or an active exporter (regular involvement in exporting). These definitions were adopted from Sharkey et al., 1989. The respondents were then asked, among other things, to indicate whether they were aware of each of 21 governmental export assistance agencies, programs, and/or resources available at the national and state levels. The list of these 21 entities is included in Table 1. The respondents were also asked to indicate their degree of interest in entering/expanding their export operations. Finally, the respondents were probed as to their perceptions regarding the impacts of the formation of NAFTA and EC on their exporting prospects.

RESULTS

Of the 55 participating firms, 5 (less than 10%) were active exporters, 21 were marginal exporters, and 29 were non-exporters. The differences in the number of years of business experience among the three groups were negligible. The average annual sales revenues of the three groups were not much different-$1.9, $2.3, and $2.5 million for the non-exporters, marginal exporters, and active exporters, respectively. The average number of employees of the active exporters (12), however, was substantially smaller than those of the other two groups (33 for both). Smaller size, therefore, at least for the participating group of firms, does not appear to have been an inhibiting factor as far as export involvement is concerned.

The active exporters in the sample have had, on average, over 11 years of experience in exporting, in comparison with 8.6 years for the marginal exporters-not a very substantial difference. Active exporters, however, draw on average 25% of their revenues from export sales, in contrast to the meager 2.7% average for marginal exporters. This difference is also reflected in the average number of country markets to which these businesses export their products-10 for active exporters versus 4.3 for marginal exporters. Canada, Mexico, and South America were the export markets of choice among marginal exporters, while Canada, Western Europe, and Southeast Asia appeared to be the major export markets for the active exporters.

Interestingly 82 percent of the non-exporters expressed moderate (50%) or high (32%) degrees of interest in entering the export arena. Even higher degree of enthusiasm was expressed for expansion of export involvement by the marginal (95%) and active (100%) This may reflect these firms' awareness of the enormous opportunities and prospects that exist in the international trade arena.

The data also that a fair amount of apprehension and uncertainty still surrounded the question of the potential impact of NAFTA and EC on the respondents' exporting plans. In both cases, while approximately one-third of the respondents felt the impact would be favorable, the majority of the rest (over one-half of the participants) were either unsure of the impact or thought it would be probably neutral.

The respondents were asked to indicate how significant lack of governmental assistance was in inhibiting their firms' from expanding activities in the exportation area. As we had expected, non-exporters rated this factor as a greater barrier than did marginal exporters, who, in turn, viewed it as a greater barrier than did active exporters (i.e., on a 5 point scale, the mean ratings were 2.3, 3.6, & 4.7, respectively). This indeed is very much consistent with the extent of awareness among the three groups concerning various governmental assistance programs in relation to exporting. As shown in Table 1, how widespread is the awareness regarding a program, depends strongly on how active the firms currently are in exporting activities. Active exporters, as a group, tend to be more aware of existence of various governmental assistance services, than are marginal exporters and non-exporters. Also the greatest difference on this issue among the three groups seems to be in relation to the U.S. & Foreign Commercial Services (US/FSC), the US/FSC's Computerized Export Qualification Program, Bureau of Export Administration, Foreign Credit Insurance Association (FCIA), the EXPORT-NOW 800 number service, and the Trade Information Center/Trade Promotion Coordinating Service.

The assistance programs for which lack of awareness is especially high and prevails across-the-board include Overseas Private Investment Corporation (OPIC) and Intenational Finance Corporation (IFC). The programs for which awareness is relatively more widespread among all respondents, on the other hand, tend to be state sponsored programs and offices.

In short lack of awareness about existing export assistance/promotion services does seem to be an impediment to small minority-owned firms' attempts to enter export markets and/or expand their current presence in those markets. Sponsoring agencies need to do a more effective job of publicizing their service offerings. Small businesses, in general, and minority-owned small businesses in particular have a tremendous under-developed/under-utilized potential in the area of exportation. Developing and utilizing this potential could result in far reaching economic and social benefits.

Table I

Percent of Minority-Owned Small Businesses Aware of Export Assistance Program/Services

	EXPORTERS			
EXPORT ASSISTANCE/ PROMO PROGRAMS/SERVICES	% Active (n-5)	% Marginal (n=21)	% Non (n-29)	Chi-Square
International Trade Administration (ITA)	60	35	39	1.05
US & Foreign Commercial Services (US/FCS)	80	30	29	5.23*
US/FCS Computerized Export Qualification Program	75	10	11	11.83***
Bureau of Export Administration	80	25	39	5.21*
Foreign Credit Insurance Association (FCIA)	60	15	10	7.40**
EXPORT NOW: 1-800-88-Trade	80	10	11	15.20***
Minority Business Agency	80	50	57	1.47
Trade Information Center/Trade Promotion Coordinating Committee	80	33	25	5.78**
Agency for International Development (AID)	20	35	46	1.53
International Executives Service Corps (IESC)	40	15	10	2.84
Small Business Administration (SBA)	5	17	25	0.92
Small Business Development Center (SBDC)	67	71	75	0.09
Overseas Private Investment Corporation (OPIC)	0	6	9	2.21
Export-Import Bank (EXIMBANK)	80	50	41	2.26
International Finance Corporation (IFC)	20	30	11	2.64
Foreign Agriculture Service (FAS)	40	35	18	2.29
Commodity Credit Corporation (CCC)	50	40	29	1.13

Nat'l Trade Data Bank	40	20	7	3.97
CompuServe Network	40	41	32	0.41
State Department of Commerce - Office of International Trade	100	86	58	2.97
State World Trade Office	100	71	42	4.03

* p< 0.10 ** p< 0.05 ** p< 0.01

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PREPARING SMALL BUSINESSES FOR WORKFORCE 2000: A PILOT STUDY

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INTRODUCTION

The Hudson Institute's report, Workforce 2000 (Johnston & Packer, 1987) predicts fundamental changes in the demographics of the American workforce, including many more older, female, non-white, immigrant, disabled, and inadequately educated workers. This research was designed to answer questions about the response of small business managers to the changing workforce. The following types of questions were asked to examine this phenomenon: 1) Do small business managers perceive that demographic changes are occurring in the workforce?; 2) Are the management practices implied by demographic projections being implemented by small business managers?; and 3) Are small business experiences and practices in addressing the changing workforce consistent with those of larger companies?

RESEARCH METHODOLOGY

A two-tiered methodology was used in this research. Quantitative data was gathered using an extensive telephone survey. Qualitative data was gathered through in-depth personal interviews with business owners. The qualitative data was not transformed quantitatively, and is summarized where appropriate.

The sample population for this research was drawn from the Cincinnati Institute of Small Business Directory (1992), published by the Greater Cincinnati Chamber of Commerce. One of the criteria to be listed in this directory is to have less than 100 employees. Attempts were made to contact each business from every other column on every fifth page of the directory. Two attempts were made to contact each business. A total of 248 companies completed the survey (91 percent return rate), and only owners (90 percent) or managers (10 percent) were interviewed. Twenty face-to-face interviews were conducted with the owners/managers of small businesses selected by a random numbers table from the Cincinnati Institute of Small Business Directory, and meeting the same criteria, as the telephone interviews.

Telephone Survey: A telephone survey was designed to interview small business owners/managers. The businesses were drawn randomly from a list of companies belonging to Cincinnati Institute of Small Business, a group affiliated with the Greater Cincinnati Chamber of Commerce. A total of 248 companies completed the survey. Each respondent was asked to evaluate five statements about the nature of the American workforce and two statements about their awareness of and response to the changing demographics of the workforce. The statements each tested a major assumption of the Tower-Perrin Workforce 2000 report (Tower-Perrin, 1990). Small business owners/managers were asked to choose from the following responses:

"strongly agree, agree, don't know, disagree, strongly disagree" for the following statements: 1) There are fewer entry level workers today; 2) The U.S. is in a national labor shortage; 3) The workforce has more older workers today; 4) There are more women in the workforce today; 5) We have a more culturally diverse workforce today; 6) Most business owners I know are aware of and concerned about the changing demographics of the workforce; 7) Many business owners I know are formulating new approaches to recruiting ethnic minorities, women, and older workers.

Face-to-Face Interviews: A survey guide was used to conduct 20 half-hour face-to-face interviews with a group of Cincinnati area small business owners, including females and blacks as well as white males. The sample consisted of 20 businesses that fulfilled our requirements of fewer than 100 employees, being listed in the directory, and agreeing to speak with us. The objective of this phase of the research was to receive in-depth reactions to the increasingly diverse workforce, including attitudes toward government efforts to encourage diversity in the workplace. Service, construction, and manufacturing businesses were included in the sample.

RESULTS FROM THE GREATER CINCINNATI STUDY

Telephone Survey Findings
Question #1: There are fewer entry level workers in the workforce today.

Finding: Small business owners have not experienced increased difficulty in locating young workers.

As shown in the next table, 62.9 percent of small business managers interviewed by telephone do not believe there are fewer entry level workers in the workforce today. The face-to-face interview data support this conclusion, indicating that most small business owners are not experiencing a problem in finding qualified young applicants for positions in their companies. This is contrary to a demographic prediction of Workforce 2000 that competition for hiring young workers would intensify because the number of people retiring from jobs will outnumber the number of new entrants (Johnston & Packer, 1987; Naisbitt, 1982).

Response	Number	Percent
Strongly Agree	37	14.9
Agree Somewhat	46	18.5
Don't Know	9	3.6
Disagree Somewhat	63	25.4
Strongly Disagree	93	37.5
N	248	100.0

Question #2: There is a national labor shortage today.
Finding: Small business owners have not yet experienced a labor shortage.

Related to the above conclusion, and as seen in the next table, only 33.4 percent of the telephone interview respondents agreed that there was a national labor shortage. In fact, only 15.7 percent agreed strongly with this statement, while 62.5 percent disagreed. This data contradicts a key premise of previous studies, that a shortage of qualified workers would encourage owners to create more welcoming environments for the increasingly multicultural workforce (Jamieson & O'Mara, 1991; Cox, 1993).

Response	Number	Percent
Strongly Agree	39	15.7
Agree Somewhat	44	17.7
Don't Know	10	4.0
Disagree Somewhat	68	27.4
Strongly Disagree	87	35.1
N	248	100.0

Question #3: There are more older workers in the workforce today.

Finding: Virtually all small business owners have recognized the aging of the workforce.

As shown in the next table, this was the most strongly affirmed finding of the study with 71.8 percent of telephone respondents "strongly agreeing" that there are more older workers today.

Response	Number	Percent
Strongly Agree	178	71.8
Agree Somewhat	56	22.6
Don't Know	4	1.6
Disagree Somewhat	7	2.8
Strongly Disagree	3	1.2
N	248	100.0

Furthermore, a number of participants indicated they were, in fact, hiring an older workforce, confirming a trend identified in the Workforce 2000 report.

Question #4: There are more women in the workforce today.

Finding: Many small business owners have recognized the feminization of the workforce.

Eighty-three percent of telephone interview respondents agreed that the workforce contains more women today. About 31.0 percent of respondents "strongly agreed" and over half (52.4 percent) "somewhat agreed" with this statement. This shows that small businesses in Cincinnati have directly experienced the growing "feminization of the workforce," a major assumption of the Hudson Report (Tower-Perrin, 1990).

Response	Number	Percent
Strongly Agree	77	31.0
Agree Somewhat	130	52.4
Don't Know	7	2.8

Disagree Somewhat	30	12.1
Strongly Disagree	4	1.6
N	248	100.0

Question #5: We have a more culturally diverse workforce today.

Finding: Small business owners have reacted in a variety of ways to the growth of the workforce population of Black, Hispanic, and Asian employees.

Sixty-one percent of telephone respondents agreed that the workforce is more culturally diverse today, as shown in the next table, while 32.6 percent disagreed with this analysis. Only 21.8 percent agreed with this statement strongly. This confirms the results of the face-to-f ace interviews, that suggest that small businesses are experiencing the impact of the growth of ethnic minority populations differently. Significantly, the Tower-Perrin report (1990) indicated that only businesses which showed a strong awareness of, and interest in, the changing ethnic mix of the workforce were likely to take steps to respond to this workforce trend. Most survey participants reported that they had not hired more ethnic minorities, and none of the businesses had the kind of recruiting, training, development, and promotion policies advocated by management experts.

Response	Number	Percent
Strongly Agree	54	21.8
Agree Somewhat	97	39.1
Don't Know	16	6.5
Disagree Somewhat	67	27.0
Strongly Disagree	14	5.6
N	248	100.0

Question #6: Most business owners I know are aware of, and concerned about, the changing demographics of the workforce.

Finding: Small business managers are aware of changing workforce demographics.

Seventy-three percent of the telephone interview respondents are aware of the changing demographics of the workforce. This high level of awareness indicates that some information on the changing demographics of the workforce has already reached small business managers. This could suggest that some small business owners are at least likely to be scanning their environments to see if their experiences match those predicted by experts.

Response	Number	Percent
Strongly Agree	70	28.2
Agree Somewhat	111	44.8
Don't Know	9	3.6
Disagree Somewhat	49	19.8
Strongly Disagree	9	3.6

N	248	100.0

Question #7: Many business owners I know are formulating new approaches to recruiting ethnic minorities, women, older employees, and handicapped workers.

Finding: Small businesses are beginning to adapt to the changing demographics of the workforce by formulating new approaches in recruiting.

As shown in the next table, 58.9 percent of the telephone interview respondents agreed they knew business owners who were formulating new approaches to recruiting employees, especially older workers and women. Twenty percent agreed strongly and 28.6 percent disagreed. This shows that many small business owners are beginning to respond to the new workforce, although a substantial number are not.

Response	Number	Percent
Strongly Agree	50	20.2
Agree Somewhat	96	38.7
Don't Know	20	8.1
Disagree Somewhat	71	28.6
Strongly Disagree	11	4.4
N	248	100.0

Face-to-Face Interview Findings

The in-depth face-to-face interviews allowed respondents to address questions about diversity in more depth than did the telephone interviews.

Finding: Adapting workplace practices to the more diverse workforce is not a high priority of small business.

When asked in the face-to-face interviews what key issues faced their companies, none of the business managers mentioned diversity. The largest number of the in-depth interview respondents identified the state of the economy and the quality of their products or services as their most pressing issues. None volunteered diversity. When asked to rank diversity on a scale of 1 to 10, with 10 being the highest score, only one ranked it higher than a 5, and the rest lower.

Finding: None of the companies reported active programs for recruiting, training, and developing a diverse workforce.

Most of those interviewed face-to-face used net-working and newspaper advertisements as tools for recruitment. None offered any type of training in diversity. Most reported they limited employee education to on-the-job training. Others offered additional job-specific training by purchasing video tapes or sending employees to meetings and conferences. Only one company had an active development program.

CONCLUSION

This study begins the process. Research must be done on a national scale to see if the results of this study generalize beyond the boundaries of greater Cincinnati.

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SMALL, LARGE, INTERNATIONAL, AND DOMESTIC: IMPLICATIONS FOR SMALL BUSINESS

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ABSTRACT

This study introduces the results of a survey of U.S. corporate executives to assess their perceptions of the critical competitive issues challenging U.S. businesses, and their responses/strategies for addressing those issues. Improving product and service quality was cited as the most important strategy to regain and sustain U.S. competitiveness. Also, the finding provides important lessons and directions for U.S. small business.

INTRODUCTION

Organizational researchers argue that various managerial, organizational and situational factors have weakened the competitiveness of many U.S. businesses at home and abroad (Hays & Abernathy, 1980; Hill, Hitt, & Hoskisson, 1988; Porter, 1990). For example, ineffective management styles, inappropriate organizational controls, erratic product/service quality, and inconsistent governmental support have contributed to a declining competitiveness of many U.S. businesses. Further, U.S. corporate executives have not understood their own vulnerabilities or capabilities because they lack understanding of the intentions of their global rivals and the reasons for potential strategies. According to Hamel and Prahalad (1989), for example, U.S. firms and executives have emphasized the strategic fit approach, while their global rivals (in particular, Japanese firms) have pursued the leveraging resources (i.e., strategic intent) approach.

The strategic fit approach suggests that strategies be trimmed to match available resources: a conservative response to challenges. In contrast, the leveraging resources approach suggests that resources be leveraged to achieve unfettered goals and ambitions by "focusing the organization's attention on winning; motivating people by communicating the value of the target; leaving room for individual and team contributions; sustaining enthusiasm by providing new operational definitions as circumstances change; and using intent consistently to guide resource allocations" (Hamel & Prahalad, 1989: p. 64-65). The leveraging resources approach has produced many successes of Japanese businesses through superior product and service quality. Consequently, these factors have resulted in an erosion of U.S. competitiveness in many industries in the last two decades.

It is obvious that the major responsibility for restoring America's global competitiveness resides with management (President's Commission on Industrial Competitiveness, 1985). This emphasizes that U.S. firms and their executives should assume the initiative in regaining and sustaining their strategic competitiveness in both domestic and international markets. With regard to the role of U.S. firms and their executives, two dichotomous approaches to organizational research have evolved. One has focused on executives (Bass & Avolio, 1990; Hambrick & Mason, 1984; Nadler & Tushman, 1989), while the other has focused on strategy and/or structure of firms (Hill, Hwang, & Kim, 1990; Hoskisson & Hitt, 1988; Jolly, 1989). This study assumes that corporate executives are ultimately responsible for responding and adapting to competitive challenges. Their perceptions and discretion will have substantial influence in shaping the business responses to competitive challenges: "The major challenge facing organizations today is to develop the capability to anticipate and influence the changes affecting them in their markets. As their markets change and become increasingly competitive, organizations need to reevaluate and change their strategies" Robbins & Duncan, 1988: p. 205).

Extending the findings of previous studies, this study describes an empirical study of perceptions of U.S. corporate executives regarding the sources of and responses to competitive challenges (i.e., issues). Specific questions examined in this study include: (1) the critical competitive issues facing U.S. businesses, (2) the most important strategies for regaining and sustaining U.S. competitiveness, (3) the best strategies for enhancing product and service quality, and (4) the influence of company size (large vs. small) and business domain (domestic vs. international) on executive views on competitive issues, strategies, and quality.

PREVIOUS STUDIES ON ISSUES, STRATEGIES, AND QUALITY

Internal and external environmental factors continuously provide information (i.e., issues) to corporate executives. The information includes a range of corporate executive discretion with regard to "the strategy mix." That is, corporate executives' perceptual processes significantly affect the construction and development of competitive strategies. This can be best described by executives' "scanning-interpretation-learning" responses (Daft & Weick, 1984; Hambrick & Snow, 1977).

Recent streams of "strategic issue management" have focused on the effects of corporate executives and their perceptual processes on organizational directions and change/performance outcomes (Dutton, Stumpf, & Wagner, 1990; Dutton, Fahey, & Narayanan, 1983). They argue that strategic issue management aims at enhancing an organization's ability to convert threats into opportunities by adapting and learning. It consists of three major stages: (1) issue perception, (2) issue assessment (strategy formulation), and (3) issue investment (strategy implementation). These stages, indicating multivariate contingency linkages, should be appropriately coaligned: High levels of corporate executive perceptions (e.g., perceived competitive challenges and need for responses) tend to lead to adopting and implementing more aggressive strategies to improve quality and competitiveness. However, potential gaps may exist between corporate executives' perceptions and strategy formulation and implementation. Therefore, those previous studies of strategic issue management also have considered internal and external organizational factors (e.g., size and history) producing the gap between corporate executives' perceptions and strategy formulation and implementation.

In addition, surveys of executive perceptions have been conducted by many researchers. For example, the Gallup survey for the American Society for Quality Control in 1987 was one of them. The primary objective of the survey was to examine the views of executives toward competitive challenges, and product and service quality. Executive responses were sought on a wide range of critical competitive issues, their responses and strategies to address those issues, and quality leadership implementation. The survey found that the improvement of service and product quality is the single most critical challenge facing U.S. businesses.

Extending the findings of the Gallup survey of corporate executive perceptions, Zeithami, Parasuraman, and Berry (1990) focused on the issue of improving quality. Developing and testing their models of quality, they described the customers' view of quality and the critical success factors to improve product and service quality. According to Zeithaml, et al. (1990), key dimensions of quality include reliability, responsiveness, assurance, and empathy. Also, the critical success factors to improve quality are management commitment to quality, goal setting, teamwork, employee-technology-job fit, and upward/horizontal communication.

Therefore, the goal of this study was to extend the findings of those previous studies and gain further insights concerning critical competitive issues, strategies, and quality.

SURVEY RESEARCH METHODS

The data for this study was collected from 296 corporate executives (e.g., CEOs, Presidents, or Vice-Presidents) of the U.S. firms included on the list of Engineering News Records. The data came from two different groups of U.S. firms based on their business orientation: 1) small and large, 2) international and domestic. Diliman's (1978) "Total Design Method" (TDM) was embraced to construct and mail questionnaires to corporate executives of 1200 U.S. firms. The overall survey response of 30.2% (330 responses received) and usable response rate of 27.6% (296 complete responses) are very satisfactory, considering that the average response rate for large scale mail surveys typically varies from 20% to 35% (Fombrun & Zajac, 1987).

Questionnaire items assessed corporate executives' perceptions (competitive issues and strategies to enhance U.S. competitiveness and improve quality), company size (sales volumes), and the level of internationalization (dichotomous variable). In particular, each executive was asked to rate the relative importance of eight competitive issues facing their businesses, four strategies to enhance competitiveness, and eight strategies to improve quality. Scale items were measured using a 7-point response format ranging from "extremely critical" to "not critical." The level of internationalization was measured by one indicator regarding the current business area of U.S. firms.

RESULTS

Competitive Issues Facing U.S. Businesses

As seen in Table 1, each executive was asked to identify the critical competitive issues currently facing U.S. businesses: product and service quality, productivity, technology, government regulation, product liability, cost of materials and labor, capital availability, and labor relations. According to the data, product and service quality was most frequently cited as being an extremely critical competitive issue. 52 percent of the executive participants rated product and service quality as critically important for competitiveness. Productivity was considered as the next most critical issue by 31 percent of the executives. Other issues identified by executives as being critical included technology (27 percent), government regulations (22 percent), capital availability (19 percent), cost of materials and labor (17 percent), labor relations (12 percent), and product liability (9 percent).

In addition, as seen in Table 1, executives of smaller firms (annual sales volume of less than 10 million dollars in the past three years) more than executives of larger firms emphasized that product and service quality (55 percent vs. 50 percent), technology (28 percent vs. 25 percent), product liability (13 percent vs. 5 percent), capital availability (24 percent vs. 15 percent), and cost of materials and labor (19 percent vs. 15 percent) are critical to their businesses.

Further, executives of international firms more than executives of domestic firms emphasized that product and service quality (54 percent vs. 49 percent), technology (29 percent vs. 24 percent), and cost of materials and labor (20 percent vs. 15 percent) are critical to their businesses.

Strategies to Enhance U.S. Competitiveness

As seen in Table 2, executives were asked to rank the importance of four strategies to manage those issues. The four strategies include: better internal management (e.g., enhancing quality and productivity through team building and training), changes of business climate (e.g., investment tax credits and antitrust laws), promoting fairness (e.g., preventing dumping and eliminating barriers to entry into foreign markets), and trade regulations.

According to the data, better internal management was most frequently cited as being the most important strategy to enhance U.S. competitiveness. 55 percent of the executive participants rated better internal management as critically important for regaining and sustaining strong competitiveness. In contrast, the executives surveyed considered promoting fairness 134 percent) and changing business climate (31 percent) were the next most important strategies. Trade regulations in the form of tariffs and import quotas was considered important by 26 percent of the executives.

In addition, executives of smaller firms more than executives of larger firms emphasized that better internal management (61 percent vs. 51 percent), trade regulations (29 percent vs. 23 percent), and changing business climate (37 percent vs. 24 percent) were the most important strategies. Executives of international firms more than executives of domestic firms said that better internal management (58 percent vs. 53 percent), promoting fairness (37 percent vs. 31 percent), and changing business climate (38 percent vs. 23 percent) were the most important strategies.

Strategies to Improve Product and Service Quality

Product and service quality were considered by executive respondents to be the most critical competitive issues facing U.S. businesses. Also, better internal management (e.g., improving quality and productivity through teambuilding and training) was cited as the most important strategy to regain and sustain strong U.S. competitiveness. Therefore, this study attempted to gain further insights concerning strategies to improve product and service quality.

Executives were asked to rate the importance of eight possible strategies of improving quality. As seen in Table 3, the four most important strategies identified in the order of importance were: (1) enhancing employee commitment and motivation, (2) change in corporate culture, (3) better upward/horizontal communication, and (4) training and education. Seventy-nine percent of the executives rated enhancing employee commitment and motivation at or near the top of the scale of importance (i.e., 5, 6, or 7). Seventy-one percent of the executives rated change in corporate culture and 68 percent rated better upward/horizontal communication as being very important. Also, sixty-five percent of executives rated training and education as being very important. Other strategies for improving quality included process control (53 percent), more expenditures on capital equipment (48 percent), better employee-technology-task fit (43 percent), and improved administrative support (35 percent). Therefore, it is obvious that the most important strategy for improving quality cluster around employees (commitment, motivation, communication, and training).

The data revealed that executives of larger firms more than executives of smaller firms rated change in corporate culture as the most important strategy for improving quality (74 percent vs. 68 percent). In contrast, executives of smaller firms more than executives of larger firms considered process control (57 percent vs. 50 percent), expenditures on capital equipment (53 percent vs. 44 percent), and improved administrative support (40 percent vs. 31 percent) as the most important strategies for improving quality. Also, executives of international firms more than executives of domestic firms rated change in corporate culture (73 percent vs. 69 percent), training and education (70 percent vs. 61 percent), process control (59 percent vs. 47 percent), and more expenditures on capital equipment (50 percent vs. 47 percent).

DISCUSSION

Of the eight competitive issues on which corporate executives were asked to identify and rank, product and service quality was the most frequently cited as critical to the executive respondents. Quality constitutes the heart of internal management actions because of its critical importance to costs, sales, competitiveness and profitability. Quality reduces costs by reducing work in process inventory, material handling, and capital equipment and reducing warranty and liability claims (Deming, 1982; Garvin, 1988; Zeithami, et al., 1990). High quality products and services increase sales and market share through improved reputation and the potential higher prices (Buzzell & Gale, 1987). Also, quality has a positive impact on profitability. According to Schoeffler, Buzzell and Heany (1974), both return on investment and net profit as a percentage of sales rose as quality increased. In particular, "relative perceived product quality" was the variable most closely associated with long-term performances of U.S. businesses.

A majority of corporate executives chose better internal management as the best strategy to strengthen their competitiveness. This is consistent with a survey of Harvard Business Review readers which concluded that the declining U.S. competitiveness is largely due to the poor performance of U.S. managers and they must find solutions to the problems (Harvard Business Review, 1987). Also, this view is more prevalent in larger/international firms than in smaller/domestic firms. That is, corporate executives of large international companies prefer to focus on issues they can control internally and to exercise their own initiatives and leadership for strengthening their competitive position. Large firms having relatively more resources are in a much better position for absorbing initial costs involved in improving quality than smaller firms. They have sizable budgets and staffing for implementing their quality improvement initiatives and training employees for long-term competitive advantages.

Also, large firms tend to be much more involved in international business transactions and are much more exposed to intense competition in both domestic and foreign markets. (Pucik, Tichy, & Barnett, 1992; Root, 1987). In contrast, smaller firms may want external intervention in the form of trade regulation, tariffs and import quotas for strengthening their competitive position. However, it is obvious that increased trade regulation would not really solve the competitiveness problems. It merely postpones the problem and generally encourages retaliating measures in other countries.

In addition, the findings of this study confirmed that the most important strategies of improving product and service quality are more often seen by U.S. corporate executives as residing in the people side of the organization rather than in technology, equipment and processes. This is generally consistent with the current contention that employees are key to organizational performance (Nemeroff, 1980; Peters, 1987; Shetty & Buehler, 1989). Companies known for superior product and service quality strongly emphasize that employees are the most important source of their quality improvement efforts and strategies.

Finally, corporate executives in large/international firms rated change in corporate culture as being more important for improving quality than executives in small/domestic firms. This finding may indicate the problems of changing corporate culture in large/international firms. Providing an alternative to the Schumpeterian hypothesis (i.e., the positive effect of large size on corporate changes/transformations), Hannan and Freeman (1989) argued that organizations tend to show symptoms of inflexibility and ineffective controls as they grow larger and reach the threshold size.

CONCLUSION

The findings of this study indicate that U.S. corporate executives assign a pivotal role to product and service quality in enhancing U.S. competitiveness. To enhance competitiveness, they try to control competitive issues internally and exercise their own initiatives and leadership. Therefore, the findings of this study could provide support to the notion that governmental policy should encourage more internal corporate initiatives for meeting the competitive challenges rather than external regulations. In fact, the findings of this study have great implications for U.S. small business management. Small business management should understand the challenges(i.e., strategic issues) and prepare their strategic responses. According to Roberts and Weiss (1988: p. 10), "the causes of the successes or failures of men depend upon their manner of suiting their conduct to the times."

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CAN SMALL FIRMS COMPETE INTERNATIONALLY?
A STUDY OF NEGOTIATING BEHAVIOR

ABSTRACT

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Little research has been performed to determine the ability of small firms to become more international in their business activities. One necessary component of global activity is negotiation. An empirical study of business firms compared the negotiating behavior of small firms to larger firms. Significant differences were found in time spent on various parts of the negotiation process and in the lack of success of the smaller firms.

INTRODUCTION

Competition for the U.S. customer and several years of recession in the economy have forced small firms into the global arena (Glick, 1993). For the firm that wants to grow, international activity may be the only option (Wolley, 1993). Foreign investment in the U.S. has reached $400 billion and continues to increase year by year. Also, with two-way trade in goods and services amounting to well over a trillion dollars, no part of the economy can avoid international relationships. Over seventy percent of American firms are actively competing against foreign-based firms. If an American firm is not competing against a foreign firm, chances are it is either being supplied by or selling to foreign based firms.

At the forefront of international business activities are the relationships, the agreements, and the contracts between firms. Obtaining these agreements and contracts requires firms to be able to negotiate with people of different nationalities and cultures. Operating across cultures magnifies the firm's negotiation problems. Cross-cultural negotiation thus has begun to take on an increasing importance to the firm desiring international business. Although international negotiations are fast becoming a way of life for small firms, failure to negotiate effectively can negate the best of plans or products.

Negotiation

Negotiation is the process by which at least two parties try to reach an agreement on matters of mutual interest. The negotiation process proceeds as an interplay of perception, information processing and reaction, all of which rely on images of reality (accurate or not), on implicit assumptions regarding the issue being negotiated, and on an underlying matrix of conventional wisdom, beliefs and social expectations. This becomes more complex when the negotiation process is international; when cultural differences must be bridged. Negotiations involve two dimensions: a matter of substance and the process itself. The latter is rarely a matter of relevance when negotiations are conducted within the same cultural setting. Only when dealing with someone from another country with a different cultural background does process usually becomes a critical barrier to substance; in such settings process first needs to be established before substantive negotiations can commence.

Over two-thirds of many negotiation efforts fail even though both sides want to reach a successful business agreement. Often barriers to a successful agreement are of a cultural nature rather than of an economical or legal basis. Since each side perceives the other from its own ethnocentric background and experience, often neither side fully comprehends why the negotiations failed. It is precisely this lack of knowledge concerning the culture and the "alien" and "unnatural" expectations of the other side that hinders effective negotiation with those from another culture. The way one succeeds in negotiations is by fully understanding others, using that understanding to one's own advantage to realize what each party wants from the negotiations, and to turn the negotiations into a win-win situation for both sides (Fisher and Ury, 1983).

Cross-Cultural Negotiations

When one takes the seemingly simple process of negotiations into a cross-cultural context, it becomes even more complex and complications tend to grow exponentially. Even if they wear the same clothes, speak English well, and prefer many of the comforts and attributes of American life (food, etc.), it would be unwise to assume that a member of another culture shares our point of view. That negotiation style used so effectively at home can be ineffective and inappropriate when dealing with people from another cultural background; in fact its use can often result in more harm than good. Heightened sensitivity, more attention to detail, and perhaps even changes in basic behavioral patterns are required when working in another culture.

When two people communicate, they rarely talk about precisely the same subject, for effective meaning is flavored by each person's own cognitive world and cultural conditioning. When negotiating internationally, this translates into anticipating culturally related ideas that are most likely to be understood by a person of a given culture. Discussions are frequently impeded because the two sides seem to be pursuing different paths of logic. In any cross-cultural context then, the potential for misunderstanding is great.

Members of different cultures may focus on different aspects of an agreement (i.e, legal, financial verses personal, relationships). The implementation of a business agreement may be stressed in one culture, while the range and prevention of practical problems emphasized in another culture. In some cultures, the attention of people is directed more towards the specific details of the agreement (documenting the agreement), while other cultures focus on how the promises can be kept (process and implementation). Americans negotiate a contract; the Japanese negotiate a personal relationship. Cultures force people to view and value differently the many social interactions inherent in fashioning an agreement.

Domestically, the study of negotiation tends to encompass business relationships between parties, tactics, bargaining strategies, contingency positions, etc. However, in a cross-cultural context, the business negotiators are separated not only by physical features and a different language, but also by a different way of perceiving the world, of defining business goals, and of thinking and feeling. From the other party's perspective, for example, Americans may appear aggressive and rude.

In cross-cultural negotiations, many of the rules taught and used domestically may not apply--especially when they may not be culturally acceptable to the other party. For most Western negotiators this includes the concepts of give and take, of bargaining, and even of compromise. The common Western ideal of a persuasive communicator--highly skilled in debate, able to overcome objections with verbal flair, an energetic extrovert-- may be regarded by members of other cultures as unnecessarily aggressive, superficial, insincere, even vulgar and repressive. To other Americans, the valued American traits of directness and frankness show evidence of good intentions and personal convictions. To an American it is complimentary to be called straightforward and aggressive. Not necessarily so, however, for members of other cultures. To describe a person as "aggressive" is a derogatory characterization to a British citizen. To the Japanese, those very same traits indicate lack of confidence in one's convictions and insincerity. Instead, terms such as thoughtful, cooperative, considerate and respectful instill positives in the Japanese and many Asian cultures.

LITERATURE REVIEW

Cross-cultural negotiations is a field of considerable interest in this age of the global economy. Literally dozens of authors have written books or articles concerning how to negotiate with another culture. The most popular cultures to discuss are, not unsurprisingly, Japan (Kramer, 1989), China (Tung, 1982), and the Russians (Nite, 1985). Although many have discussed those elements in cross cultural negotiations which are crucial to business success (Herbig and Kramer, 1991; Graham, 1985 for example), few empirical studies have been conducted.

Negotiation has been an area rich in research with hundreds of studies having been conducted in the field. However, few studies have been conducted on cross-cultural negotiations in a business setting. Fewer still have used non-students. Tung (1982) found Japanese and Chinese bargaining behavior to be considerably different from that of Americans. Graham (1981, 1985) reported differences in business negotiating styles comparing American and Japanese business negotiators and American and Soviet businesspersons. Adler and Graham (1989) examined cross cultural business negotiations from a macro view to determine if the processes used in cross-cultural negotiations were different from that used in domestic negotiations.

However, it is difficult to find studies that examine the international (cross-cultural) negotiation process itself. Can small firms survive and succeed in the international arena? Can small firms compete with larger firms in negotiating agreements and contracts? To find answers to these questions, a study was conducted of U.S. firms with international activities or international dealings. They were queried on the elements of the negotiating process itself, to see if small firms were similar to large firms in both performance and achievement.

METHODOLOGY

Data for this study was collected by mail survey. State industrial directories were obtained from the international trade section of five geographically dispersed states throughout the U.S. Such directories are published by each state's economic development group. Survey participants then were randomly selected from the directories. Surveys were addressed to the CEO/President or the designated international official (if provided in the directory) for each firm. A cover letter asked the recipients to guide the survey to the most relevant respondent within the company. One hundred and fifty one (151) useable responses were received. Many of the unusable responses reported that their firm had not yet begun importing or exporting and so had no cross-cultural negotiating experience. In this survey, the CEO may or may not have been the most knowledgeable in the company, resulting in its delegation to another person. Multiple handling may have decreased responses to the mail questionnaire.

The recipients were questioned about their latest cross-cultural negotiation. The last page of the questionnaire also included questions about organizational characteristics and demographics (size, experience, language). Chi Square analysis was used to analyze differences across organizations for each question. Subsequent analysis used T-tests to assess mean differences for particular questions.

RESULTS

The respondents were divided into two groupings. All firms with less than $10 million in sales were considered small businesses (87 firms). All firms with over $10 million in sales were considered to be 'large' (64 firms). Table 1 shows significant differences found for small firms while Table 2 shows significant differences found for large firms. In essence, larger firms tended to spend more time on pre-negotiation planning ($t=4.7; p<.001$), arrive earlier for negotiation preparations ($t=2.5; p<.013$), leave later with longer debriefings ($t=2.14; p<.34$), have longer session durations ($t=3.68; p<.001$) and longer total negotiation length ($t=4.4; p<.001$). Larger firms also tended to have its negotiating team composed of more members ($t=7.8; p<.001$). The larger the firm, the greater the tendency to be briefed on the negotiating tactics of the other firms ($x2=14.22; p<.007$) and larger firms had briefers with longer negotiation experience 15 years vs. 2 years) ($t=2.4; p<.01$). Larger firms disproportionately used cultural and business experts more often than small firms. Larger firms perceived greater time % differences (avg. 28 vs 15) between domestic and international negotiations ($t=3.48; p<.001$).

Table 1

Significant Differences for Small Firms

a. Predominantly, the other side did adapt (or were perceived to have done so) more to smaller firm's negotiating behavior ($x2=9.36; p<.009$)

b. The smaller the firm, the more likely to compromise ($x2=14.98; p<.005$)

c. Smaller firms tend predominantly to be sellers ($x2=6; p<.07$) and to take greater advantages of selling opportunities ($t=2.3;p<.02$)

d. Smaller firms tend not to use translators while larger firms do ($x2=20;p<.001$)

e. Small firms tended to meet in the US; larger firms in the other's country ($x2=23;p<.001$)

f. Smaller firms disproportionately had unsuccessful negotiations ($x2=6.5$, $p<.011$)

Predominantly, the smaller the firm, the more likely it was to compromise ($x2=14.98;p<.005$). Smaller firms tend predominantly to be sellers ($x2=6;p<.07$) and take greater advantage of selling opportunities ($t=2.3;p<.02$). Smaller firms tend not to use translators while larger firms do ($x2=20;p<.001$). Small firms tended to meet in the U.S.; larger firms in other side's country ($x2=23;p<.001$). But perhaps most discouragingly, smaller firms disproportionately had unsuccessful negotiations ($x2=6.5$, $p<.011$).

Table 2

Significant Differences for Large Firms

a. Larger firms disproportionately were more likely to change their negotiating style compared to small firms.

b. Larger firms disproportionately more often used cultural and business experts than small firms.

c. Larger firms reported using briefers with longer negotiation experience (5 years vs. 2 years) ($t=2.4;p<.01$)

d. Larger firms perceive greater % differences (avg. 28 vs 15) between domestic and international negotiations ($t=3.48;p<.001$)

e. The larger the firm, the longer the typical session duration ($t=3.68;p<.001$) and the longer the negotiations lasted ($t=4.4;p<.001$)

f. The larger the firm, the greater the tendency to be briefed on the negotiating tactics used by the other side ($x2=14.22;p<.007$)

g. Larger firms tended to: Spend more time on pre-negotiation planning ($t=4.7;p<.001$), Arrive earlier for negotiation preparations ($t=2.5;p<.013$) and, Leave later with longer debriefings ($t=2.14;p<.34$)

h. The larger the firm, the more members it had on its negotiating team ($t=7.8;p<.001$)

Table 3 shows the process and the average percentage means for both small firms and large firms. Significantly, smaller firms indicated they spent less time in negotiations involved in compromise than did larger firms, yet had to compromise more frequently. Small firms also reported the other side spent a much higher percentage of time involved in the first two stages of the negotiating, process--rapport and positioning, than did larger firms. Perhaps this explains the finding that the other side more often had to adapt to smaller firms instead of vice versa, and this would account for the larger degree of upfront time spent by the foreign firm.

Table 3

Proportional Time Spent at Various Negotiation Activities: A Comparison Between Small & Large Firms

Negotiating Activities	Mean Values
Own Side	Other Side
Small/Large	
Establishing Rapport	
14.5/15.3	7/15*
Positioning	
11/15	10/16*
Reflection, Evaluation, Persuasion	
17/26*	12.5/18*
Compromise	
10/23*	7/14*
Agreement, Review, Revision	
15/13.5	13.6/14.8

/ denotes mean % score for small/large businesses. This indicates the perceived time spent for each articular activity within the negotiation process itself. Rounding and averaging prevents each column from adding to 100%.

* significant at p<.05 level

Use of translators, members on negotiating team, site where negotiations were held, days of prenegotiating briefing provided, use of briefing experts, amount of time spent on compromise during the negotiating process, and whether the firm was a buyer or seller all were important variables in this study.

CONCLUSIONS

This study noted major differences between large and small firms. Of particular interest is the conclusion that smaller firms disproportionately fail at cross-cultural negotiations. Of all the factors, the use of translators, briefers, and providing a prenegotiating session, were determined to be major reasons for success versus failure in the negotiating effort. Therefore, small firms that wish to have a higher likelihood of cross-cultural negotiating success are encouraged to have more people involved in the negotiations, to use translators, and to devote several days to prenegotiation briefing with particularly country and cultural experts, that is, to prepare and to practice for the negotiations.

Failure may not be attributed strictly to size. The differences between success and failure may be traced to the resources or capabilities size allows a firm to have. That is, larger firms can better afford and more often have translators, briefers/experts, and have more time to prepare and brief, than do small firms. The lesson to take from this is not that small firms have less likelihood for success than larger firms but perhaps that smaller firms should be better prepared for negotiating than their larger counterparts.

In summary, as a firm starts into the international arena, it must think about and be prepared for negotiating agreements and contracts. And, to succeed at cross-cultural negotiations requires:

1) Recognizing that a foreign negotiator is different. Accept and respect the other side's culture. Be prepared to communicate and operate on both cultural wavelengths.

2) Being culturally neutral. Do not cast judgment on the other party's cultural mores. Recognize that they probably feel the same way about your culture as you do theirs. All that is necessary is that you accept and respect their norms as part of their culture.

3) Being sensitive to cultural norms and taboos. It is necessary to accept, and to proceed with the business at hand, in order to come home with an agreement beneficial to both parties, and to the start of a long-term healthy relationship between two companies from two separate cultures.

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RESEARCH TOOLS FOR SMALL BUSINESS - PANACEA OR GUIDE?

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ABSTRACT

Small businesses are encouraged to do their homework before major decisions are made and resulting changes are initiated. "Homework" many times means doing research, analyzing the research, and making reasoned decisions based on the completed research.

This paper examines the usefulness of research as a decision making guide and secondly offers evidence to indicate that reasoned analysis of research data doesn't always lead the ultimate consumer of the data, the small business decision maker to the same conclusions as the researcher.

INTRODUCTION

Major decisions made by small businesses many times make or break a going concern. Competition requires that small businesses constantly strive to expand and improve product lines and services. However, typically a small business flourishes not by expansion within the existing confines of a current geographic market area but by expansion into a totally new geographic area.

Decisions facing a small businessperson concerning expansion, relocation and the like are oftentimes some of the most difficult. Knowing if a business is at a point where expansion is feasible is just the starting point for a series of decisions which become more and more vexing as more decisions are made.

OBJECTIVES

This paper profiles key points of a retail location study survey which was to assess potential demand for specialty mens goods and services. Secondly the project analyzed the competition already existing in the market.

The small businessman who commissioned the study serviced specialty clients in "big and tall" men's apparel as well as a separate general men's clothing store. The proprietor was running two successful big and tall stores in communities with combined market area populations of approximately three hundred fifty thousand.

The ultimate intent of the study was to ascertain potential regarding the establishment of a new "big and tall" apparel store in another Midwest city with a market population of approximately two hundred thousand about two hundred fifty miles away from his home base store(s).

The owner reasoned that current successes could be replicated in other communities with similar profiles. A decision about whether or not to expand into another market area seemingly commanded that some market research and resulting analysis be performed.

The owner contracted with a regional research firm to do some basic market research. Issues to be probed would generally address potential demand for a specialty store catering to the clothing needs of "big and/or tall" men.

REVIEW OF THE LITERATURE

The review of the literature reveals that the majority of the recent success in big and tall merchandising is in the big category. Department stores and discounters have tried the market and met with limited success. For the current picture, the specialty stores appear to have retained market position and "position of mind." The literature indicates that the market is a difficult one to serve. Specialty stores have not painted an overly optimistic picture of opportunity or potential. Most quotes, projections, and comments were on the conservative side. Key concepts that predominated were customer service, attention to detail and a wide inventory to insure that the needs of the big and tall man are met successfully.

The national trends appear to fit into the following patterns:

-B&T men want fashion oriented clothing
-B&T men want depth in product line offering
-Brand names are important
-Department stores have jumped "in and out" of B&T
-Specialty stores have stayed the course with B&T
-Projections for growth are conservative at best

RESEARCH DESIGN

A telephone survey instrument was designed and ultimately approved by the business owner after many drafts.

The research team ultimately interviewed three hundred households. A Big and Tall shopper was one who shopped for clothing for men who were over six feet tall or who wore sizes bigger than an extra large.

Those respondents were then asked a battery of questions concerning:

-Shopping frequency
-For whom shopping was done (self spouse, friend, relative, etc.)
-Unprompted recollection of retailers
-Retailers' pricing
-Retailers' quality
-Store preference
-Reasons for typically shopping at a given store
-Suggested improvements for existing stores
-Amount of expenditures for big and tall clothing in year
-Catalog shopping frequency

-Catalog shopping preferences
-Favorite brand(s)

SURVEY FINDINGS

For the most part the primary research data tended to follow national Big and Tall trends. If anything, the Big and Tall Midwestern consumers surveyed appeared to be even more conservative regarding shopping habits than the national trends indicated. Highlights of the research project effort are as follows:

Once verified as a Big and Tall shopper respondents were asked, "How many times in the past year have you shopped for that big or tall man?

Number of times	
None	1%
1-2	25%
3-5	29%
6-10	19%
11-20	12%
Over 20	13%

Other key points:

The data indicated that over 50% of the profiled respondents make five or fewer shopping trips per year for big or tall men apparel.

Larger national or regional stores appeared to have strong "share of mind" positions. Of the 350 respondents 192 named an existing big and tall specialty store in the area or J.C. Penney (98 respondents) as the "name(s) of the men's clothing stores that sell big or tall men's clothes . . . in your shopping area."

The existing specialty big and tall men's clothing store in the area was perceived as the most expensive and as having the highest quality merchandise. A plurality of respondents were more likely to say, however, that the main reason they typically shop for big or tall men's clothing at their favorite store was not price or location.

The most mentioned reasons had to do with range of selection (sizes etc.). Curiously, location was not in the top five reasons given for customer preference.

That information coupled with the respondents unprompted recommendations for improvements to their store of choice was by far the desire for a "wider variety" along with lower prices. Location again was mentioned by only three of the three hundred fifty respondents.

Potential market size was addressed by the question, "About how much do you spend on big or tall men's clothing in a year, under $100, between $100 and $250, between $250 and $500, between $500 and $750, or more than $750?"

Amount Spent

Under $100	17%
$100-$250	33%
$251-$500	29%
$501-$750	12%
Over $750	8%

The data continued to reflect little significant opportunity for a big and tall specialty store in the surveyed area.

ADDITIONAL SURVEY INFORMATION

-Largest income group was $31-40 thousand range
-Big and Tall shoppers in the 25-45 age group were the most fashion oriented
-Most Big and Tall shopping was done by "self" (35%) or spouse (35%)
-Most of the respondents (68%) did not shop by catalog for Big and Tall items
-Unlike national trends in Big and Tall brand loyalty most respondents (66%) in the area surveyed could not name a specific brand. If brands were named they were brands of apparel produced for general consumption (Levi, Dockers, Wrangler) not specifically for B&T consumer

RECOMMENDATIONS TO CLIENT

The data in the survey taken as a whole indicated that the new area surveyed might not be the best potential market area in which to establish a new Big and Tall venture. The market already seemed to have a predominant Big and Tall retailer in the market area.

The small business wishing to establish a foothold in the market would seemingly have an uphill battle. In fact, the researchers hired to do the primary data collection stated that, "based on the conservative responses revealed in the. . . data, it is recommended that (small businessman commissioning the study) consider other perhaps more opportune locations."

The researchers also concluded, "Potential for another Big and Tall specialty store in _____(city, state) appeared to be conservative at best. _____ (Established store) appears to have a fairly well established presence of mind and market position. . . The data indicated very conservative patterns, plus very limited spending with regard to big and tall clothing. Part of this could be contributed to the conservative Midwest, however, _____(small business commissioning research) should compare data closely with shopping patterns in both and_____ (cities where small businessperson operates big and tall stores).

IMPLICATIONS

The client was apprised in writing by letter with accompanying data tables and analysis and verbally through an on site presentation of the data and conclusions drawn by the researchers.

The client also spent a good deal of time consulting with the researchers about the study and the various interpretations which could be drawn from the data and the review of the literature.

The client asked the researchers specific questions about research methodology, survey design, questionnaire construction, and various statistical questions. Based on the educational background of the small businessperson (graduate of the Wharton School of Business) and on the business experiences of the client the researchers felt that the client would not proceed with the expansion into the new territory.

The client was not a novice at interpreting primary research data or digesting literature information about current topics. The principles in the business were well schooled in business decision making from purely empirical standpoints. However, the researchers discounted one crucial variable in this small businessperson's final decision making equation.

Despite the pessimistic overtones of the review of the literature and after close inspection of the data the client ultimately decided to go ahead with the expansion into the new area. The client interpreted some components of the data as indicative of soft spots in the market where one could fill a perceived void. In short, the client was quite vehement in pursuit of the expansion project

While the researchers looked at the totality of the data and reached a recommendation against expansion, the small business person based on two prior successful ventures saw opportunities to compete with and possibly displace customers presently served by existing vendors.

Specifically, the researchers underestimated the weight which the small business person gave to responses indicating a desire for more fashion options, especially with the age 25-45 demographics. Also, the small businessperson saw great potential for vastly increasing the number of times the shopper shopped for big and tall merchandise as well as increasing the overall amount spent within a year for big and tall apparel.

The client also saw an opportunity due to the fact that customer loyalty could be developed to a much greater extent. That concept coupled with the fact that location seemed to have little impact as a far as customer loyalty meant that the small business could locate in a relatively inexpensive site within the general locale thus driving down initial real estate costs.

EPILOGUE

In short the client saw more opportunities in the intangibles than did the researchers. The researchers took a steady as she goes approach knowing the small business person had two well established big and tall businesses within eighty miles of each other as well as other apparel businesses which were also doing quite nicely.

The client and the researchers have collaborated on other projects both before and after the research effort described in this article. Such a relationship has offered many opportunities for the researchers and this small business person to discuss this venture.

The small business owner decided to reject the overall recommendation of the researchers and to expand into the area which some of the data indicated would be tough sledding. Fortunately, the small business owner made a decision which turned out well. It appears that the newly established small business that caters to the big and tall consumer in the new location approximately two hundred fifty miles from the home base of operations is doing very well. In fact, the small business owner has indicated that the store is ahead of their own projections based on their other two big and tall stores in the region.

SUMMARY

By anecdote the small business person has stated over and again that research is crucial to business decision making. However, he has gone on to say that research is merely a guide and not a panacea in decision making. Also, what one sees in the analysis of research data does not necessarily lead to the same ultimate conclusions by all. What may be seen by some observers (researchers) as a potential weakness may be seen as an opportunity by those who have a different base of information from which to draw (small business person with a track record of success).

Simply put, small businesses should not reject data or recommendations made to them by neutral disinterested researchers as out of hand. By the same token many times small business owners have other information at their ready which casts new or different light on the research data. The value of information accrued though the regular course of doing business is many times difficult to assess. However, that historical information source may be much more valuable in some instances than empirical data. "Research is a guide, not a panacea for the small business decision maker."

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A NEW MARKETING COMPETITIVE ADVANTAGE: TIME BASED COMPETENCIES AND ITS IMPACT ON SMALL BUSINESS

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ABSTRACT

Global competition has intensified the search for competitive advantages resulting in many firms adopting just-in-time manufacturing, total quality programs, and leaner more flexible production systems. As businesses have adopted these programs they have discovered the ability to compete with respect to time. As customers request more products with less lead time, businesses who can adapt and respond to met these changing needs will survive and those who can not compete on time will become less efficient and less competitive. This paper discusses how a firm can develop time based competencies and the impact of this trend on small businesses.

INTRODUCTION

The movement to global markets has intensified competition for big and small businesses in the United States (6). Some tools used to meet this increasing competition, are just-in-time manufacturing systems (2), total quality programs (2), and leaner more flexible production systems (8). These new techniques have lead to a new marketing competitive advantage based on time competencies (1; 10). Time based companies decreased the total cycle time from conception of a product or service to actual delivery to customers.

The ability to compete on time provides distinct competitive abilities (10). A time competitive organization develops new products and services more rapidly than its competitors and moves faster to meet changing customer needs. In order to compete on time organizations have usually instituted quality programs and can therefore compete on quality (5). The development of 'leaner' flexible production systems enables the firm to also compete on variety (5). The combined ability to compete on time, quality, and product variety presents formidable strategic and marketing barriers for a firm's competitors. These firms will increase productivity, decrease costs, decrease risk, increase market shares and position themselves for effective global competition. Those firms that do not develop time competencies may not survive.

STEPS TO COMPETING ON TIME

Step 1: Attitude Change. The first requirement is a top to bottom attitude change from 'Why it will not work' to 'How can we make it work' (2)? This change requires top-level support, encouragement and involvement from top managers to the lowest organizational levels.

Step 2: Internal Evaluation. The firm evaluates what it is doing right now and why. It identifies strengths, weaknesses, opportunities and threats. The analysis scrutinizes the organizational culture. This critical self analysis identifies areas for possible change and time reductions.

Step 3: Diagram the Process. The organization diagrams the entire process from conception of a product or service through design, manufacturing, marketing, and distribution. The analysis describes and explains each task or step and the relationships between the steps to determine which steps can be done concurrently and which must be done sequentially. Each step is timed and analyzed for time reduction. Usually quality can be designed into a product eliminating time-consuming quality checks. Cross disciplinary teams of design engineers and production specialists design products that are easier and more economical to manufacture. Just-in-time manufacturing reduces inventory with consequent reductions in costs and time commitments (See Appendix A and Appendix B) (7). The old tools of value engineering and value analysis contribute to these new time reductions.

Step 4: Gap Analysis. A gap analysis identifies specific actions that the firm must take to speed up productivity, increase quality, change development, and decrease both production, administrative, and operations cycles.

Step 5: Change Organizational Processes. The organization seeks to empower and involve all its employees, decision makers, suppliers, others in the supply chain, and most importantly the customer. As part of this process, quality is designed into the product, its manufacturability, and the entire production and distribution systems (See design part of figure in Appendix A). The organization trains its employees in statistical process control so they can discern, significant deviations in material, quality, and production flow. They are involved throughout the process and check quality continually and especially at certain quality check points marked 'TQC' in Appendix A.

The cross disciplinary teams design the physical layout to smoothly process the work flow and facilitate incoming parts or sub assemblies. Incoming parts come into the assembly process as needed and where they are needed - see Appendix A. The Japanese Kanpan system is used to replenish materials as they are needed. This process eliminates parts inventories and contributes to cost reductions (2).

Step 6: Market Analysis. A critical market analysis identifies those niches that best match the firm's competencies and future goals. The firm identifies these customers' current and future needs. The analysis also identifies the customers it does not wish such as those who are: poorer, unreachable, or unpredictable.

Step 7: Develop the Supply Chain. The intent is to identify all of the firms in the supply chain from raw material suppliers to the firms serving the ultimate customers. The time based firm changes its attitude from being the 'lone wolf' to building relations throughout the supply chain for concerted action towards marketing to its customers. Many firms are developing better long term relationships with fewer suppliers (3; 7). Some firms analyze a potential supplier's financial, quality, and time capabilities and then 'certify' the elite few as their suppliers. Production schedules are shared and production and delivery coordinated to reduce inventory and time spent checking and counting incoming material (7). This enables the firm to develop their just-in-time manufacturing system. Some big businesses are forming strategic alliances with these few suppliers to build long term relationships. The key is the development of trust and cooperation rather than adversarial relationships with suppliers (3).

Step 8: Focus on Flexibility, Innovation, and Customer Responsiveness. The firm changes its entire orientation to a marketing one. How can it serve its chosen customers with flexibility and innovation better and faster than its competitors?

Step 9: Value Analysis. Value analysis identifies each task as value adding or non value adding. This analysis is from the point of view of the customer. If the step adds value to the customer it is value adding, if not it is non value adding (2). While the organization analyzes each step as a possible candidate for a time reduction, the non-value adding steps are especially scrutinized. Examples of steps that can be reduced are: counting incoming materials, checking incoming materials for quality, moving items into and out of inventory, and administrative paper work. While these steps seem 'important' to the firm they are not important to the customer. Backburn's research shows that many white collar or administrative functions are not value adding and constitute a large percentage of the cycle time, sometimes 95 percent (1). In the latter case only 5 percent of the whole process added anything the customer considered valuable.

Step 10: Develop a Strategy of Surprise for Competitors. Surprise is the ultimate weapon of business. Totally surprised competitors are always at the disadvantage of having to react to your initiative.

Step 11: A Comprehensive MIS -System. The final requirement is an efficient information system linking the factory to sales staff and decision makers (4). An information system coordinates the manufacturing system and the suppliers through electronic data interchange. The system can also tie actual sales into the factory floor to drive production. An information system coupled with a flexible and lean production system enables fast changes and quick adjustments to actual customer sales.

SUMMARY

These eleven steps set the stage for competition based on time. Each step is complex and fraught with difficulties. Even so, the firm that uses less time will be the low cost operator, produce at the highest quality, and provide the best customer service. The ultimate strategic weapons of low cost, high quality, and best service are the results of better time management.

EXAMPLES

An example of a successful time based company is Benetton, an Italian sportswear company, which created a customer drawn marketing system in women's fashions (4). Benetton has an information system that instantly sends sales data to the production plant. The system reports what is selling and in what locations by size, color, and garment. Benetton developed a highly automated, flexible manufacturing system that switches with minimal inefficiencies among garment types, styles, and colors.

The information system tracks what is selling in each store location and immediately signals Italy to send variations of more sizes and colors of the best selling clothes in that store. A CAD-CAM program creates automatic knitting formulas for the entire size range given one basic design that is selling well. A central warehouse consolidates the physical garments for shipments to specific stores. Even if Benetton misses a trend, the CAD-CAM program can design their own garment with a full range of styles and colors (4). Being time competitive creates flexibility that will force Benetton's industry-especially competitors- to change.

An example of a small business that developed time competencies is a small Midwest paper company that makes paper products (4). The company developed time competencies and went from losses to profitability with a 20 percent return on equity. It supplies four times the number of products as its competitors at low prices that its competitors cannot match. By being time competitive, it created price barriers that eliminated competition in product niches.

A final example is Honda of Japan that outmarketed Yamaha by producing 113 major model changes in eighteen months to Yamaha's 37 (4). It did this by using sophisticated CAD-CAM systems and cross compatible parts in synchronous factories. Honda overwhelmed its competitor by creating customer services that Yamaha could not match.

CONCLUSIONS FOR SMALL BUSINESSES

Small businesses can adopt these practices and achieve time based competencies themselves enabling them to compete with bigger and perhaps slower competitors. Those small businesses supplying big businesses must develop quality, variety, and time competencies to be accepted as one of the few selected and certified suppliers. Those small businesses that do not develop these capabilities face almost certain extinction. Global competition will force more small businesses to become more competitive. Like big businesses, the ability to compete on time enables them to compete on other dimensions. Improved marketing competitiveness and customer service are of significant strategic importance.

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APPENDIX A

JIT/TQM AND TIME BASED

```
Sales
Data
on   ----------------------------------->  Conception  ---------------------------->Design------
Market                                                                                         |
Forecasts                                                                                      |
                                                                                               |
   ----------------------------------------------------------------------------------------------
  |
  |   --->part 1        --->part 3        --->part 5
  |   |          |          |
  |   |          |          |
  -->Assembly TQC  ------  Assembly TQC  ------  Assembly TQC  ------>  Distribution
      |          |          |
      |          |          |
      --->part 2        --->part 4        --->part 6
```

APPENDIX B

TRADITIONAL PROCESS

Sales Data   Truck Part 1 = Receiving

```
on Market  ------>Conception  ------>  Design  ------>  Truck Part 2 = Count          Inventory
Projections                                               Truck Part X = Inspection        |
                                                                                           |
   ----------------------------------------------------------------------------------------
   |
   |                            Reworks
   |                     -----------------------
Opening                   |                      |
 Stock   -------->  Manufacturing  ----->   Inspection  ------>  Inventory  ------> Distribution
   |                                             |
   -----------------------------------------------
```