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It is my pleasure to welcome you to the 43nd Small Business Institute® Annual Academic Conference in Orlando, Florida.

Each year, we are honored to receive a wonderful collection of submissions to the SBI Annual Conference. This year is no exception, as you will see in the 32 Competitive Papers and Abstracts, six Best Practices, four Workshops, five Innovatove Education, Teaching, and Pedagogy presentations, and four Roundtables being presented at this year's conference. You, our members, are the reason the 2019 volume of the Proceedings is such a high quality publication. The time and effort you invest into research and other small business and entrepreneurial projects makes the SBI what it is, and allows this conference to showcase the great work being done in our area. I hope you enjoy reading these Proceedings - there are truly some "magical" works within its pages that both explore under-researched areas and discuss new research and teaching approaches. I certainly got some new research ideas and teaching tips from reading this work, and hope you do too.

The publication of these *Proceedings* would be impossible with you, the SBI membership. Your hard work and diligence cannot be applauded enough, and is critical to the continued success of SBI. I would personally like to thank those who reviewed the many papers, abstracts, projects, and other submissions received this year. Your insightful feedback and thoughtful comments are highly valued by authors, and help to create the friendly and supportive research culture that the SBI is famous for.

Finally, thank you to the SBI Board for the countless hours you all spend making our conference happen, and specifically for making the *Proceedings* successful. I would like to personally thank Whitney Peake for her expertise and patience in guiding me through this process, and the rest of the Board for their efforts in supporting and developing this unique organization.

All the best.

Andrew Holt

VP of Programs, Elect

Andrew Holl

Proceedings Editor

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COMPETITIVE PAPERS

Towards an Integrated, Holistic Approach to Teaching Strategy

William M. Donaldson Christopher Newport University

Abstract

The debate over whether it is best to teach strategy using theory or practical examples continues to rage in academia. This article seeks to move beyond the debate. By utilizing a holistic approach including both methods, a strategy course can, and should, become a more impactful experience for students. An integrated pedagogy more closely aligns with the practice used in leading companies which should be the model for small businesses. This paper offers arguments for both approaches, shares an example using an integrated approach at an undergraduate-only business school, and concludes with the challenges of adopting such an approach.

Keywords: Strategy, strategic management, pedagogy

INTRODUCTION

The debate over whether it is best to teach strategy using theory or practical examples continues to rage in academia. The history of teaching strategy at Harvard discusses how the discipline has followed a succession of new management thought trends derived from academic research in the various disciplines (Bower, 2008). Each new trend is promoted to be the one way to teach strategy at that time (Greiner, Bhambri, & Cummings, 2003). Bennis and O'Toole conclude that business schools have lost their way by succumbing to the lure of strict academic and disciplinary rigor and losing sight of the practical application involved in management as practiced in the real world (Bennis & O'Toole, 2005). This assessment is not new. Long ago systems scientists and theorists warned that managers do not solve easy, linear problems, they managed complex, multi-disciplinary "messes" and argued against a reductionist, disciplinary approach to management (Ackoff, 1971, 1999; Churchman, 1979; Deming, 1986). However, a rarefied, theoretical approach is precisely where the teaching of strategy has ended up (Bennis & O'Toole, 2005; Greiner et al., 2003). This article seeks to close the debate and acknowledge that each method has merit, but even when combined are insufficient and need to be improved.

George Stoddard famously wrote, "We learn to do neither by thinking nor by doing; we learn to do by thinking about what we are doing" (Stoddard, 1981). I believe it is not a pedagogical question of one method or the other. As teachers, I believe we must adopt a philosophy Roger Martin recommends for leaders and managers, a "both/and" mindset (Martin, 2009). Both theory and practical case study examples are essential to the teaching of strategic management. Both individual thought and team dynamics are critical to learning strategic management. Success in the classroom and the workplace requires both disciplinary and interdisciplinary skills. By combining systems thinking as a unifying discipline, deep immersion in a semester-long simulation, and the two traditional methods, the course becomes an integrated, holistic learning environment. Bower describes the central role a general management course on strategy plays as an integrating force, often as the capstone (Bower, 2008). One would be hard-pressed to find a more appropriate place to bring all of the elements of a classic business school education together, yet we have moved away from this integration towards a more fragmented, theoretical approach (Bennis & O'Toole, 2005; Ghoshal, 2005; Greiner et al., 2003). I believe we must move the discipline to a more integrative stance, and embrace the emerging trend of simulation and augmentation brought about by technology advancements (Lovelace, Eggers, & Dyck, 2016). Khurana offers a proper caution concerning the move away from practice to theory exclusively and the

resulting diminution of management as a profession (Khurana, 2007). The use of an integrated approach is particularly germane in the teaching of small business, experiential learning. Students interested inworking for large businesses have the dangerous luxury of specializing in one discipline area. Small business owners and employees must be multi-disciplinary. Therefore our students must have experience in this environment to be fully prepared.

I believe the strategy course should reclaim its rightful position as the capstone course in business education. However, to do so, we as teachers must be willing to rethink our approach and adopt a more integrated and immersive pedagogical model.

"We continue to believe that the overriding challenge for those of us teaching strategic management is to find ways to integrate with other disciplines, as well as to invent learning methods that require increased practice of both analytical and behavioral skills (Greiner et al., 2003)."

The remainder of this paper will present an integrated model for the teaching of strategy; explore the benefits of such a model and conclude with some challenges to implementation.

THE STRATEGIC MANAGEMENT CAPSTONE - REINVISIONED

Perhaps it is because I have extensive experience as both a practitioner and an academic that I already utilize an integrated, holistic model for teaching strategic management. Figure 1 provides a graphical representation of the current course structure and flow. In developing and refining the course, I used the following critical priorities:

Introducing systems thinking as the unifying discipline through which students can integrate prior disciplinary knowledge.

Providing context as to why both theory and practice are critical to an understanding of strategic management.

Teaching the course using tools and techniques the students will use in their careers to enforce concepts and enhance learning.

Employ multiple learning modalities for assurance of learning.

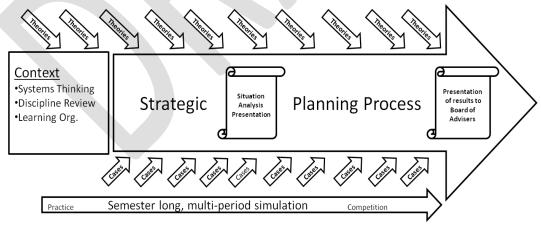


Figure 1: Graphical View of Integrated Course

Key building blocks of the course are as follows:

Introduction to strategic management – Giving context

This portion of the course is designed to refresh learning from the individual disciplines, introduce the concept of strategic management, and integrate team learning and experience as a holistic approach centered on Senge's concept of using strategy as the tool to

build the learning organization (Senge, 1990a, 1990b). In this phase, students are introduced to the concept of the enterprise as a unified whole, a system, not a collection of disciplines. Coverage of this important unifying discipline is an area lacking in most business curricula (Ackoff, Addison, & Carey, 2010; Bardoel & Haslett, 2004; Donaldson, 2017; Gharajedaghi, 2006; Senge, 1990b). This lack is succinctly captured by Bennis and O'Toole, "the integration of discipline-based knowledge with the requirements of business practice is left to the student (Bennis & O'Toole, 2005)."

During this phase, I remind students from the various discipline areas of the importance of the other disciplines to the enterprise as a whole and get the students to acknowledge, often grudgingly, that importance. Systems thinking is introduced as "the discipline that integrates the discipline" (Senge, 1990a). We explore the enterprise as a whole, not a collection of disciplines, using a set of systems lenses. This approach carries through the entire semester and I expect students to demonstrate a willingness to take a holistic approach. I address the issue of theory versus practice head on. I tell students they will need to be able to use both theory and practice to be able to analyze complex environments like the one they will face in the simulation used later in the class. Importantly, we discuss the timing and proper use of each approach, and we revisit the duality throughout the semester.

Theoretical constructs applicable to strategy assessment and formulation

Theories advanced in individual disciplines are reviewed throughout the semester, and those from the realm of strategy are introduced. These include, but are not limited to, industrial organization economics (IOE), resource-based view (RBV), Porter's Five Forces, cost versus differentiation, agency, corporate social responsibility, network effects, economies of scale and scope, Ansoff matrix, etc. Theories are important as a framing constructs so we cannot ignore their importance and power (Grant, 2008). Students must be able to conceptualize complex, ambiguous environments and theoretical frameworks offer tools to this end (Ackoff et al., 2010; Cajiao & Burke, 2016; Deming, 1994; Drucker, 2001). However, instead of introducing and exploring the theories in a vacuum, each is paired directly with a case study (or studies) that outlines how the theory played out in at least one case (see next section). Additionally, the theories are explored using the prior systems thinking approach which adds to the nuance and subtlety often missing in theoretical discussions (Feldman & Worline, 2016).

Case studies matched to theory discussions

The course uses case studies as experiential learning tools to give the students context associated with theoretical constructs (Cajiao & Burke, 2016; Feldman & Worline, 2016). Cases are carefully selected or developed to parallel the applicability and use of the matching theory discussed during the class sessions. Students are required to analyze the case individually and submit a written response to questions. Once in class, case discussion occurs in conjunction with the corresponding theory, or theories. Students are encouraged to debate the issues in the case and the theories as a complex whole. Discussion boards are available for ongoing discussion after the class session. Feldman and Worline highlight and promote the benefit of such an approach to learning (Feldman & Worline, 2016).

"Practice theory focuses on these unfolding constellations of activity or practices and explores how they emerge through time as connected doings and savings, as well as how they connect with other practices."

Use of an actual strategic planning process as the core structure of the course

By using an actual planning process, students become immersed in the rhythm and flow of the very process they will use when they matriculate. Students are first introduced to the general flow of strategic planning—Environmental scanning, strategy formulation, execution, review; Boyd's OODA loop; POIM (Plan, Organize, Implement, Measure), etc.—followed by discussion of a variety of planning processes. The course then follows the flow of one such process. The practical use of the tools they will use in their careers forces students past a superficial knowledge of both the tool and the material associated with it (Cajiao & Burke, 2016; Jarzabkowski, Giulietti, Oliveira, & Amoo, 2013; Jarzabkowski & Kaplan, 2015). Love them or hate them, they come to understand the tools in powerful new ways.

Multi-period, semester-long simulation with progress and results presentations

The students learn, and then compete in, a rigorous, multi-period simulation (Capstone simulation program from Capsim). Student teams must first learn the industry dynamics in Capstone and present a formal Situation Analysis at the conclusion of the practice rounds. The presentation of the situation analysis parallels the completion of the practice rounds of the simulation. At this point, the students should be able to intelligently present on the dynamics of their new industry and propose a strategy for success. After the competition, the student teams must present their results, good or bad, to members of the school's Board of Advisors and invited executives. These activities simulate the environment for which we hope we are preparing our students, real-life business environments. Lovelace et al. in "I Do and I Understand," and others describe the benefits of using simulations and experiential learning modalities as effective learning tools (Cajiao & Burke, 2016; Feldman & Worline, 2016; Lovelace et al., 2016). I have found engagement, and resulting learning is dramatically improved using the simulation. Students become emotionally invested in the outcome when the results are immediately available and there is a consequence to their learning (Lovelace et al., 2016). Edgar Dale in his now ubiquitous "Cone of Learning" embeds a powerful entreaty for involvement. Dale claimed that as a student progresses through the cone in two-week increments if they are "involved" they will remember and retain upwards of ninety percent of the information and experiences (Wagner, 1970).

THE BENEFITS OF A HOLISTIC APPROACH

In their review of twenty strategy course descriptions, Greiner et al. detected little evidence that "any linkage is being made with surrounding courses" (Greiner et al., 2003). The benefits of a holistic approach cannot be overstated. Our graduates will enter the world that is inter-disciplinary and full of complex, multi-faceted challenges. Our traditional, disciplinary swim lanes and the reductionist approach these engender will be of little use in this environment. In fact, we do our students a disservice by not teaching using an integrated approach (Bardoel & Haslett, 2004; Bennis & O'Toole, 2005; Cajiao & Burke, 2016; Deming, 1994; Drucker, 2001; Senge, 1990b).

Figure 2 demonstrates the full breadth of coverage available utilizing an integrated, holistic approach.

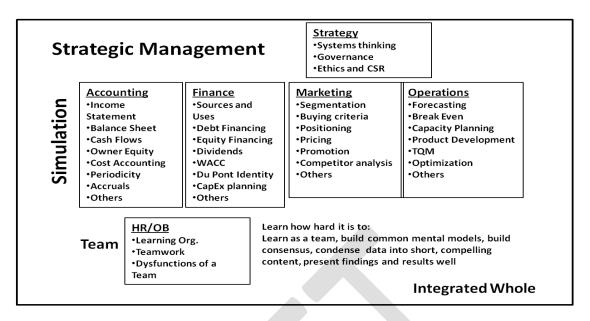


Figure 2

This course structure highlights both theory and practical methodologies. The simulation acts as a laboratory for students to interact with the theories they are learning and the implications of applying them (Feldman & Worline, 2016; Jarzabkowski et al., 2013; Schneider & Lieb, 2004).

Add simulation for involvement and engagement

The ancients long ago recognized the power of involvement. The Chinese proverb variously attributed to Xun Zi and Confucius, "I hear, and I forget. I see, and I remember. I do, and I understand", hints at this power (Lovelace et al., 2016). In higher education, the benefits that involvement has on learning outcomes is well documented (Bonwell & Elson, 1991). The use of practical case studies is credited with almost single-handedly raising the teaching of strategy, then called Business Policy, to the pinnacle of our profession (Bennis & O'Toole, 2005; Bower, 2008). However, case studies alone are no longer enough. Our students want more, and technology developments have put rich, engaging simulated experiences at our student's fingertips (Fink, 2013; Salas, Wildman, & Piccolo, 2009).

Benefits of the simulation experience

During the simulation, students must come to grips with several enlightening discoveries:

- 1. Each situation is different to each viewer and each team. Where strategy can look homogeneous and obvious with the benefit of hindsight, strategy must be formed before the fog lifts. Even one of the greats, Michael Porter, circled back to the uniqueness of each firm and attendant strategy (Porter, 1987). Teams must learn to wrestle with competing views of the environment, risk profiles, management styles, philosophies, and desire for results, enforcing organizational behavior and leadership principles (Feldman & Worline, 2016; Joullie', 2016; Schneider & Lieb, 2004).
- 2. Team cohesion is critical to team learning which is critical to the generation of a common mental model of the challenge (Senge, 1990a, 1990b).

- 3. The enterprise is a system, which must be optimized, and this often entails suboptimizing individual functions or disciplines within the whole. This notion is counter-intuitive to most students and managers (Donaldson, 2017).
- 4. Synthesizing the vast amount of information into a short, coherent Situation Analysis is a difficult task (Schneider & Lieb, 2004). Even with almost complete information on the industry dynamics and competitors, the students make the same mistakes practitioners make—leaving out critical information, failing to gain a team perspective, failing to consider competitive moves, etc.
- 5. Even though competitors are all positioned identically, and each team could have the same "view" of the opportunities and threats, each team's view is different
- 6. Actions taken and results derived, good or bad, have to be explained to a higher authority at some time in your management career (Bennis & O'Toole, 2005).

These discoveries parallel the ones experienced by practitioners in the real word of strategy and only derive from engagement and involvement in a team-based simulation. They are not available in theory or case study modalities. "We cannot make all of our students CEO for a day," however, we can and must try to simulate that experience as closely as we can (Greiner et al., 2003). Lack of interest on the part of our students is not the impediment; it is our lack of flexibility and creativity. The very traits we preach to our students as critical for outbound success are our undoing. The same authors report more favorable views of all the disciplines when students are shown the inter-dependent nature of the disciplines in practice (Greiner et al., 2003). I witness a dramatic increase in appreciation of and engagement with the other disciplines when the students become aware of the importance and are required to confront it in the simulation portion of the course.

The use of multiple modalities for assurance of learning

All of the elements of the course are designed to assess the arc of learning experienced by the student. The major elements are as follows:

- Written case study submissions and discussion board posts allow for assessing individual and group understanding as well as writing and analytical skills.
- Traditional quizzes and testing provide assessments of individual knowledge of theories, concepts, and critical terms.
- Presentations provide assessment of analytical, verbal, and presentation skills.
- Peer assessments throughout the team-based portion of the class and a peer-grading component at the end of semester allow for assessment of collaboration and communication skills. Peer reviews are available to all team members throughout the semester to aid in team building.

Learning and growth are the basis for individual student and team assessment, not how well they performed in the simulation. Just as in real life, it is possible to be out-smarted in the marketplace. Therefore, student's ability to explain their team's results, even if those results are poor, is the basis for grading. Additionally, extra credit is available for exceptional performance in the simulation or the presentation of results.

Challenges to implementation

Much has been written about the challenges of teaching strategic management (Bennis & O'Toole, 2005; Grant, 2008; Jarzabkowski & Paul Spee, 2009; Schneider & Lieb, 2004). Specific challenges advanced in previous articles include:

Independence of experienced faculty and the tendency to teach strategy as an extension of their discipline leading to very different courses (Greiner et al., 2003). Faculty focus on research into theories, not application (Bower, 2008; Greiner et al., 2003).

Tenure considerations based primarily on theory (Bennis & O'Toole, 2005; Bower, 2008; Greiner et al., 2003).

The primacy of tenure-track faculty in university hierarchies versus practitioners with the experience to teach strategy (Bennis & O'Toole, 2005; Bower, 2008).

It is ironic that politics and disciplinary swim lanes conspire against effective integration of the disciplines, yet this is precisely a failure mode we advise would-be-managers, our students, to avoid in practice (Greiner et al., 2003). The comprehensive scope and nature of strategic management—the integrating of all the disciplines, the synthesis of all the information needed to make strategic decisions, and the conquering of all the organizational behaviors necessary to forge an actionable strategy—is daunting to even the most seasoned managers. For academics with little real world experience and strong disciplinary ties, it may seem almost impossible. Add to these, incorporating outside evaluators, such as board members, and the challenge is even harder. So what are we to do?

If we were consulting with a client with the same problem, we would encourage them to:

Revise their job descriptions to capture the requisite skills and experience needed in qualified candidates.

Modify their search, interviewing, and hiring practices to identify qualified candidates. Modify their compensation plans and development processes to attract, develop, and retain successful candidates.

Review and restructure their service offering(s) to reflect the integrated nature of the delivered product.

The above is sound advice. If it is sound advice for our client, can we afford to ignore it? Will heeding the advice be easy? Nothing worth doing is. Are we as an academy willing to address the issue, or will we let our past constrain our future? Compelling strategic management questions, all.

CONCLUSION

For too long we have debated which method of teaching strategy is most effective, practice or theory, especially when it comes to the small business environment. The debate, while interesting to academics, has taken our focus away from the broader problem of keeping the business curriculum current with emerging technologies, theories, and modalities of teaching. Only by adopting a holistic approach and returning the strategy course to a prominent place as a capstone, integrative experience can we regain the needed focus. Adoption of such an approach will not be easy, and there will be much complaining from within the academy. As business professors, we are all aware how little organizations, and the people in them, like change. However, the fact these proposed changes will be hard and will upset our current equilibrium is not a valid justification for our lack of progress. The business world outside our walls will little care about our struggles. I believe an integrated, holistic approach to strategy is the only way to engage truly and deeply our students. If we do not create compelling academic experiences for them, competitive offerings will rise to meet the demand from outside the academy. There is already evidence of this occurring as popular press authors and consultants have begun to dominate the high-ground of corporate strategy teaching (Bower, 2008).

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Teaching Cases on Small Businesses for Today's Generation

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Abstract

Although case study instructional methods have been used in business schools for many years, the practice of teaching with case studies has largely followed a specific delivery and implementation style often credited to Harvard Business School and focused on large, publically traded firms. We believe many other alternatives exist for implementing case studies for today's college students that focus on small businesses (i.e., where more of them are likely to gain employment). Accordingly, we provide an overview of the case study methodology and then explain three useful alternative methods for delivering small business case studies to millennials and generation z.

Keywords: case study, case method, small business, management education, millennials

Introduction

Management education curriculum often relies on case studies to help students understand business problems, conduct analyses, make decisions, and generate solutions. Largely this has been an effective pedagogical practice to enhance student analytical capabilities (Ates, 2013) and deepen understanding (Rendtorff, 2015). To date, the Harvard case study methodology remains popular and heavily used (Barnes, Christensen, & Hansen, 1994; Kimball, 1995). Yet upon critical review this method has certain limitations (i.e., Damle, 1989). For example, Booth and colleagues note that as class sizes expand, the issue of free-riding becomes more problematic (Booth, Bowie, Jordan, & Rippin, 2000) while others take a metamorphic approach that suggests we need to be more open to diverse meanings within case studies (Greenhalgh, 2007). Hence as the nature of today's learning environment has become more dynamic, the delivery of case materials needs greater flexibility. Another critical factor in the ever-changing dynamic within the classroom is the noticeable change in generational differences in the student population.

We echo some of these concerns and suggest that more alternatives are needed in case instruction. Accordingly, we offer a focus based on small business and provide three alternatives for instructors to use case based instruction. While a great proportion of our students will work for small businesses, small business strategy is historically housed with entrepreneurship education (e.g., Matthews, 1998; Zeithaml & Rice, 1987) and lacks coverage in many strategic management textbooks and courses. Thus, we provide explanations describing how each alternative can be implemented and delivered with greater emphasis on learning through the use of case studies for two of the most likely contexts: today's generation and in small businesses. Moreover, we create a table to compare and contrast the different case delivery alternatives; this allows other instructors to gage which alternative might best match the case and context that s(he) wishes to deliver. Before describing these alternatives, we provide an overview of the case study method. Then we explain our three alternative techniques to delivering case studies. This is followed by our discussion, which includes limitations, future research, implications and the conclusion.

Learning Theory, Case Studies, and Context

Before delving into the specifics of case study techniques, past research on contextual factors and their relationship to method choice must be reviewed. Reviews indicate that the most common practice in case study delivery is the Harvard Business School (HBS) method (Barnes, Christensen, & Hansen, 1994; Kimball, 1995). Relatively little research, however, has explored the applicability of this method to various educational settings and learning styles across generations. Indeed, while there has been some variation such as case playing (Wilson, 2015), changes in education tools and delivery techniques, as well as changes in generational expectations and learning styles may affect the applicability of particular methods of case study pedagogy.

Learning Theory

Management scholars have long battled an objective pedagogical approach, where information is disseminated strictly in a one-way path from instructor to student. Students assume the role of passive learning in these traditional lecture structures (Bouton & Garth, 1983). This approach relies heavily on surface level learning and the process of memorization or regurgitation of course material (Entwistle, 2003) and is generally disregarded as a sufficient learning outcome (Pfeffer & Fong, 2004). Specifically in the context of management, the lack of application based knowledge underequips students to make "real-world" decisions that they are sure to encounter in their respective careers.

Organizations tend to seek applicants with a refined skill set, who can not only diagnose a scenario but also properly implement decisions (Bossidy, Charan, & Burck, 2002). In the context of strategic management especially, decisions cannot be made in a vacuum or without time constraints. Supporting this, Sroufe, Sivasubramaniam, Ramos, and Saiia (2015) note that business graduates must understand cause and effect relationships, stakeholder ideals, and how to foster short and long-term company success to manage effectively. To be most aptly prepared for the context surrounding career relevant decisions, students need to learn in such a way that supports that thought process. Learning and program design must also be centered on goals and objectives that are directly tied to the course context (Sroufe et al., 2015). This also allows for direct and easily connected evaluation of program design in terms of experiential learning and effectiveness (Sroufe et al., 2015).

Both academics and practitioners alike have acknowledged the acute need for learning rooted in experiential, analytical, and problem-solving curricula (e.g., Foster & Carboni, 2009; Peterson, 2004). Such experiential learning is in its simplest form whenever the student shifts from the role of passive listener to that of active respondent (Hawtrey, 2007). Learning of this form is more holistic in approach as the learner is forced to employ not only life experiences, but also reflect on these experiences to derive meaning (Kolb, 1984). To facilitate student learning, a number of methods have traditionally been successful in and out of the classroom. Internships, simulations, and case studies represent a sample of some of these. With this in mind, experiential learning methods can remind students that everyone can offer useful insights, but all participants must collectively communicate knowledge and share their ideas to foster collaboration (Trefalt, 2014). The remaining narrative of this manuscript will focus specifically on the latter, the case study method.

"The" Case Study Method

HBS is largely considered responsible for generating the mainstream technique for delivering cases in business schools. HBS describes their case method as placing the student into the role of decision maker; giving them the power to analyze, identify problems, and

more. To accomplish this, students are required to read cases before the formal class meeting in which they participate in a guided discussion that allows them to address issues, discuss differing opinions, explore alternative solutions, and more (HBS Case Method, 2016). This process can stimulate greater classroom participation, along with a deeper understanding of the topic/issue outlined in the case. HBS outlines appropriate methods for structuring case study learning. These include describing learning objectives, teaching opportunities and challenges, and the class design as elements of effective class preparation before utilizing the case method. Learning objectives must be identified before the selection of the case. Teaching opportunities and challenges must be analyzed before and after selecting the case, and the class design must be well developed including the structure, opening, discussion leadership, and closing to ensure the method is effectively carried out. (Elements of Effective Class Preparation, 2005).

Context: Cases and Today's College Student

The case method is renowned for breaking the mold of traditional classroom learning and increasing conceptual understanding and collective engagement among students (Herreid & Schiller, 2013). While the case study has inspired many alternative instruction methods in business schools, the case method is sometimes viewed as an outdated teaching concept/model, which students have grown to resent and resist. Some instructors even deem the case method as simple story telling (Herreid & Schiller, 2013). Even as publishers update the case offerings on a constant basis to appeal to the students, a disconnect remains between student and engagement with the material maintains. Generational research on learning theory suggests that today's traditional college-age students tend to be less independent than previous generations and thus require different amounts of guidance and feedback (Feiertag & Berge, 2008). These students tend to communicate less effectively by traditional standards, but are highly skilled in constant, technologically based communication and interactive exchanges (Feiertag & Berge, 2008).

Today's students are products of a society that has often over-inflated their individual self-esteem, recognized them for any accomplishment and accommodated their exploration of uniqueness (e.g. Alsop, 2008; Twenge & Campbell, 2008). Bushman, Moeller, and Crocker (2011) found that college-age students value self-esteem more than food, sex, money, and friends. In the classroom context, millennials require near constant structure and direction (Feiertag & Berge, 2008), arguably a product of their overconsumption of content and a focus on outcomes (grades) versus actual learning. The findings of such studies have multiple implications for the evolving presentation of management curricula. As accrediting bodies call for more and more coordination across courses, this one-size fits all approach may be detrimental to the learning potential of today's generation. The case method, historically, has created a platform for critical analysis and problem solving refinement. The new perspective of today's generation presents an opportunity to refine this established method for maximum effectiveness in management classrooms.

Accordingly, these reasons present a need for alternatives to the traditional case method, both in content and delivery. There has been some progress to create alternatives. Indeed, some instructors are using the "flipped classroom," where students view case studies on their own time at their own rate (Herreid & Schiller, 2013). We favor these efforts and believe instructional strategies must continue to evolve. Thus we offer a focus on small business as that pivot and present three small business related alternative delivery methods for using cases in the classroom. The underlying learning theories advocating the usage of case studies are still relevant. However, as with any type of change, the case method may need a flexible adaptation to match current behavioral and learning styles.

Context: Making the "Case" for Small Business Content

As mentioned, even as publishers and academics strive to infuse trendy companies into the classroom, the level of engagement (and subsequent learning environment) still disconnects. Although, on the surface, students may connect with the companies (MAY CHOOSE TO LIST SOME??) their true connection generally ends there. In 2014, there 29.6 million small businesses, they have created 63% of all new jobs since 1994 and employ more than half of all Americans (SBA, 2014). Odds are, students are most likely not only to start their careers in small businesses, but maintain throughout their duration.

Just because probabilities dictate students are more likely to be employed with small businesses at some point in their careers doesn't justify a large-scale sweep of case content and guarantee a new found level of engagement and learning in the classroom. Trendy companies have long been a draw for students since they are already familiar and the topic is potentially less mundane. However, from a learning perspective, criticism has grown. With subsequent generations, students have become more disattached from the high growth ventures prominent in the typical case format. They largely disconnect not only from where students are most likely to spend their careers, but also in regards to their perspectives and value structures.

Today's generations embrace the obligation of advocating change in the world (Twenge, 2010) and small businesses offer a far more malleable structure and platform to accommodate impact. Small businesses generate 16 times the number of patents per employee than do the large companies (SBA, 2014). Small business owners maintain the autonomy and control, while being free from social constraints (Shane, 1995) facilitating innovation. These characteristics meld harmoniously with the overarching perspectives of the current generations (Twenge, 2010). Additionally, Research shows a consistent generational trend toward leisure-related values. For instance, Millennials tend to place higher emphasis on time off, work-life balance, and being entertained (Twenge, 2010). One of the reasons small businesses are such a major employer in the U.S. lies in the advanced flexibility over larger businesses to offer employment to those with varied work histories and needs (Katz & Greene, 2017).

Three Case Based Instructional Alternatives Addressing Changing Times

We acknowledge that just a mere switch in the content of cases in any course offering won't cause a paradigmatic shift in student learning. Widespread curriculum already exists in the entrepreneurship and small business arena and small business cases are plentiful. For the proposed case learning initiative maximization to occur, the structure and delivery of the case method must also shift to accommodate the content. With that, we propose three approaches that align themselves with the tenants of small businesses.

Each of these three alternatives has similarities and differences in comparison to the HBS case method, but each also uniquely integrates components of small businesses that are especially relevant to the current generation of students Our hope is that other instructors find certain alternatives useful for varying cases and contexts. For convenience, a summary of the HBS case method and the three alternatives is included in Table 1.

Table 1. Comparison of Four Case Study Methods

	TIDOR 1	A14 41 4	414 4: 2	414 41 2
Summary	Students individually prepare to explain problems and make decisions during an instructor led discussion	Alternative 1 Student teams review a case on their own and all participate in a class discussion and debate based on instructor prompting	Student teams present a case and recommendations to the class followed by a Q&A session to support their decisions	Students individually prepare to use analytical techniques to answer in-class case based questions.
Instructor prep amount required	High	Moderate	Low	Moderate
Class structure and formalization level	High	Moderate	Moderate	Moderate
Class time required	Moderate	Moderate	Moderate	Low to moderate
Recommended class size	Medium to large	Medium	Medium	Small to medium
Graduate/Undergraduate appropriateness	Graduate and undergraduate applicability	Ideal for introductory undergraduate course types	Graduate and undergraduate applicability	Ideal for advanced undergraduate course types
Level of student preparation required	High	Moderate	Moderate	High
Availability of applicable cases	High	High	High	High

Alternative 1 – Team Based

The purpose of this initial alternative is to synthesize the text material with real world examples and create an environment simulating a competition in a debate format. Participants are typically divided into teams of four to five or as the instructor sees fit. This method works well when paired with any other semester long team project as students are already on teams. Each team is assigned the same case including additional instructions for analyzing and discussing the case material. This alternative begins with students gaining a general impression of the case on their own followed by more collective team discussion and interaction. Moreover, this option requires participants to actively contribute to the activity and create new knowledge and ideals on the spot. Certain nuances in the directions encourage

participation from all students and not simply the top performers. By debriefing the case at the end of the discussion instructors can point out specific student examples of information syntheses and integration to encourage students to prepare more holistically for future discussions.

Of our three alternatives this model most closely resembles the HBS case method. Students work in teams to prepare for a discussion where they are responsible to contribute and synthesize content form the course with situations in the case. The discussion of the given case will be facilitated, but the path and depth of the discussion will rely upon the combined contributions of each team. Each team is expected to generate ideas both individually and as a team and then contribute those ideas in the collective team discussion between teams (and facilitated by the instructor). While participants will have read and discussed the case in advance, it is very difficult to predict the direction of the discussion. Thus this alternative also provides a comprehensive test of students' knowledge. Even though the case content from the text may remain static, the nature of the debate and presentation changes each time as the direction, coverage, and issues raised are dictated by the students. The students are competing for a scarce resource (extra credit points) and must prepare and operate in an unknown/volatile environment that changes each week.

For more details regarding the learning objectives and student feedback, please see Table 2 and Table 3.

Table 2. Learning Objections of Alternative Case Study Options

Alternative 1 – Team Based

Learning objectives.

- 1. Students will actively participate and gain a greater understanding of course material.
- 2. Students will be motivated to work collectively, thus increasing effective teamwork.
- 3. Students will problem solve in a timely manner.
- 4. Students will compare and discuss ideas they presented with ones presented by rival teams and the instructor at the conclusion of the activity, enhancing reasoning and depth of understanding of course concepts.

Alternative 2 – Expert Teams

Learning objectives.

- 1. Students will be held responsible for the main content of this method, as they will be carrying out most of the method in the form of expert team presentations.
- 2. Students will demonstrate a deep understanding of case material as applied to course concepts.
- 3. Students will enhance their abilities to lead a discussion, as well as their abilities to analyze and rebut content presented.
- 4. Students will evaluate presented material in a manner that fosters discussion and generates new ideas related to the content.
- 5. All students will actively participate.

Alternative 3 – Theory Based

Learning objectives.

- 1. Students will actively implement analytical models presented in lecture sessions and demonstrate their understanding of prior course material.
- 2. Students will present course material.
- 3. Students will engage in collective discussion and analysis of content that classmates present.
- 4. Students will be held responsible for explaining course material.
- 5. All students will actively participate.

Table 3. Student Feedback

	Table 3. Student Feedback
	Student Feedback
Alternative 1	Although I didn't like the cases in the beginning, the debates by the end of the semester became my favorite part of the course.
	• The cases – loved the fact that we (students) decided the topics to discuss about each company and were in control of the conversation.
	• I didn't think I would learn so much from my classmates when discussing the cases each week.
	• I'm not normally a competitive person, but the cases each week motivated me to really work hard with my teams to try and win the debate each week.
Alternative 2	I enjoyed asking the other groups tough questions to see how prepared they were. Sort of like a board room setting.
	 Group work is challenging but it wasn't bad since we just had to prepare to be the experts once and the other weeks we were learning from our peers and having discussions about what we read.
	 Really digging in to one case rather than knowing surface level info. about many cases is what I liked about it. And because I got to research and present on a corporation that I was truly interested in. Having a choice in the matter was key if you want students to actually be an expert during their presentations.
	The presentation was challenging and as were the questions but I gained a much more thorough understanding of my case than discussions I'd had in other classes.
Alternative 3	I love Dr! He makes the class very interesting because he doesn't focus solely on theory. He often talks about things that we will encounter in the real world.
	Weekly Case study: Very Useful
	• Dris AWESOME. I wish we had more professors like him. His
	classroom cases always make us think and challenge us to look at things differently. He keeps track of participation and I enjoy his grading system.
	• The course is a bit difficult being that it is for graduating seniors. His methods of teaching were fun and showed his personality but were also helpful in really understanding the material.
	Dr is amazing. Instead of having a structured lecture, he allows ample time for class discussions and sometimes turns that into his lecture.
	 Excellent professor! Instructor & course provides a good information, examples and applications of how it could be in the business world depending on the area, field or position you would be entering.
	He explained things well and made it easy for me to understand the material. I love how his class is structured!

See Appendix 1 and 2 for implementation instructions and additional information for a version of the instructions that can be shared with students. Appendix 2 also provides further suggestions for students and caveats for the instructor.

Appendix 1. Implementing the Team Based Method

Prior to Implementation.

- 1. Assign teams and provide access to the assigned case.
- 2. Provide instructions (see Appendix 1) and requirements for reviewing the case prior to class.
 - a. Inform students exactly what is expected of them in preparation for and during this method.
- 3. Encourage students to determine potential questions/concerns and share them prior to the method.
- 4. Develop backup questions to ask students if discussion lags.
- 5. Develop a foolproof way to record participation of teams and individual students during the method.

- 6. Create a means of obtaining student feedback after the method is complete.
 - a. This could be a questionnaire, in-class discussion, etc.
- 7. Remind students to ensure they have access to the case material during the method.

Student preparation.

- 1. Review instructions provided by the instructor.
- 2. Read and analyze the assigned case by taking notes and making sure to grasp a complete understanding of the material.
- 3. Discuss the case with team members prior to the class meeting.
- 4. Make sure to have access to the case material during the method. (This can be a physical or digital copy).

During the team based method.

- 1. Begin by arranging the classroom area into an appropriate space for teams.
- 2. Provide a blank sheet of paper for teams to write their team letter large enough for the instructor and all classmates/teams to easily view.

Instructor requirements.

- 1. Direct each team to an appropriate table.
- 2. Ask all teams if they have any questions before beginning the method.
- 3. Keep track of team participation. For example, one member should not always speak for the entire team.
- 4. Begin by asking each team questions that they are familiar with (i.e. the questions on the instruction sheet in Appendix 2).
 - a. Include other questions here that arise during the method or that were previously created.
- 5. Allow all teams to discuss each preparation question until the topics are exhausted.
- 6. Move on to the re-analyze step of the method by allowing students the opportunity to take another look at the case considering their own points and also considering ideas presented by other team.
- 7. Continue by asking each team questions that allow them to reanalyze the situation (i.e. the questions labeled re-analyze on the instruction sheet in Appendix 1).
 - a. Include other questions that come during the method or that were previously created.
- 8. Allow all teams to discuss questions and re-analyze the case until the topics are exhausted.
- 9. De-brief the case for the students.
 - a. This method is exceptionally adaptable, so instructors can de-brief the case in ways that are meaningful in the context and specific environment in which the method is being delivered.
- 10. Allow for team discussion during the de-briefing.
- 11. Ask the students again if there are any unresolved questions before ending the method.

After the method.

- 1. Award bonus points to the team that contributed the most to the discussion.
 - a. Allow teams to vote for the team that allowed for the most strategic insight into the issues.
 - b. Teams cannot vote for themselves.
- 2. Evaluate individual student performance and compile student grades based on your notes.
 - a. Add or detract bonus points.
- 3. Obtain student feedback.
 - a. Students can submit feedback immediately or electronically at a later date. provide feedback
- 4. Note areas that did not flow smoothly during the method and determine ways to enhance these areas.

Appendix 2. Additional Directions for the Team Based Alternative

Preparation: To best prepare for each case, each member should get a general understanding of the case. To do so, you might consider some of the following questions.

- What organizations and industries/sectors does the case involve?
- Is the organization doing well and how has it performed in the past?
- Look at the development of the organization over time. What strategies has it pursued? Which have succeeded and which have failed? How successful has the organization been?
- What are your initial impressions of the main issues and choices confronting the organization? Is it in an expanding industry/sector, or a maturing one? Are customer needs changing? Does the organization confront a variety of opportunities? Or is there a particular strategic issue that the case is oriented towards?

Re-analyze: Review the case more thoroughly as a team and consider some of the following questions.

- Why was this case chosen at this point in the semester?
- What have been and are likely to be the key drivers of success in the environment that may give rise to opportunities or threats?
- What is the nature of the competitive environment?
- What strategic capabilities does the organization have/lack? Which of these capabilities (if any) have provided the organization with a competitive advantage, or could provide competitive advantage?
- Who are the organization's stakeholders and what are their expectations? Are they aligned? Who has more or less influence over the organization's strategy?
- What are the major issues that the organization's future strategy needs to address?

Further Suggestions: Each team should develop talking points in anticipation of the direction the discussion flows. As you will see below, it is imperative that all teammates participate in this assignment, as the nature of it will not allow one member to simply carry the whole team.

Bonus Points: These are awarded to the team that contributes the most to the conversation in terms of strategic insight. Teams will vote by providing an extensive explanation of why the team they are voting for provided the highest level of strategic insight. Teams may not vote for themselves. Each team is eligible for some points even if they do not obtain the majority of votes.

Caveats:

- Any member of a team cannot have consecutive inputs.
- Each team must sit together with a designation card displaying their team letter.
- Members must be present for entire discussion to be eligible for bonus points.
- If discussion lags, the instructor will randomly choose teams to contribute.

Alternative 2 – Expert Teams

Alternative two can be accomplished in groups of two to six members in which one group of students prepares a presentation on a specific case in advance. They are considered

the experts for that case and discussants on the other cases. The presentation includes the basics of the case, outside research, recommendations and solutions, among other information that the group chooses to include. The presenting group is the focal group. After presenting the case, groups will be engaged by the instructor as well as the rest of the class in a question and answer session. Generally speaking, students have very intense preparation for their expert case and then less preparation for the other case

This alternative case method differs in that it requires more outside research, preparation, and planning during students' respective expert weeks. The presenters/experts answer all of the questions and guide the discussion. To increase overall class engagement levels, non-presenting participants may be required to prepare a one-page document of comments and questions they intend to contribute to the discussion. This insures every student is prepared rather than only preparing for one case and then free riding on the other cases. This method greatly reduces preparation for instructors since the presenting team is responsible for answering all questions and concerns. Alternatively, instructors may need to spend more time evaluating students' work after the presentation and discussion. A major objective of this method is increased students leadership behaviors in at least one of the case presentations and discussions. Refer back to Tables 2 and 3 for more information regarding learning objectives and students' feedback. Implementation instructions are provided in Appendix 3. Please see Appendix 4 for a student handout that lists more detailed instructions for the expert team presentations.

Appendix 3. Implementing the Expert Teams Method

Prior to implementation.

- 1. Assign teams and provide access to the specific assigned case to each team member OR allow the students to select teams and register for a specific case from the text.
- 2. Provide instructions (see Appendix 2) for reviewing the case prior to the day of the method.
- 4. Provide access to all cases used so students are familiar with the content teams will present.
- 5. Determine if students will be required to bring a one-page (or more) document with questions and discussion points related to each case that the expert teams are presenting.
- 6. Develop your own questions in case future discussions lag.
- 7. Develop means to record participation of teams and individual students during the method.
- 8. Create a means of obtaining student feedback after the method is complete.
- 9. Remind students to ensure they have access to the case material during the method.

Student preparation.

- 1. Review instructions provided by the instructor.
- 2. Read each case used in the activity so that no case is unfamiliar during the method.
- 3. Prepare a one-page (or more) document with questions and discussion points related to each case that the expert teams are presenting (if applicable).
- 4. Read and analyze the assigned case by taking notes and grasping understanding of the material.
- 5. Discuss the case extensively with team members prior to the class meeting.
- 6. Create a case presentation that follows the instructions presented in Appendix 2.
- 7. Prepare three multiple-choice test questions based on the information presented in the case.
- 8. Review instructions again to ensure that the presentation and questions meet all requirements.
- 9. Make sure to have access to the case material during the method. (This can be a physical or digital copy).

During the team based method.

- 1. Students were already provided instructions for how the method is going to be completed, so begin by arranging the classroom area into an appropriate space for teams.
- 2. Provide a blank index card or sheet of paper for teams to write their case names large enough for the instructor and all classmates/teams to easily view.

Instructor requirements.

- 1. Direct each team to an appropriate table.
- 2. Ask all teams if they have any last minute questions before beginning the method.
- 3. Encourage all students to take notes, reminding them of the test questions that each team created based on their presentation material.
- 4. Keep track of team participation. For example, one member should not always speak for the entire team. Each student in the class is expected to contribute to the overall discussion and presentation equally.
- 5. Begin by determining an order of presentations.
- 6. Allow the first expert team to present, keeping track of time to ensure they do not breach 18 minutes, and then allow time for the remaining students/teams to ask questions and discuss the material presented.
- 7. Allow all teams time for discussion until the topics are exhausted.
- 8. Ask any further questions not already addressed by the class and stimulate the discussion if it lags.
- 9. Repeat steps 7-9 until all expert teams have presented.
- 10. Conclude presentations by discussing, strategies, presentation techniques, etc. that stood out to them.
- 11. Collect the test questions from all expert teams reminding students these may appear on future exams.
- 12. Ask the students again if there are any unresolved questions before ending the method.
- 13. Remind students that the test questions will be on their next exam.

After the method.

- 1. Evaluate expert team and individual student performance and compile student grades.
- 2. Obtain student feedback: Students can provide feedback immediately after the method or can be sent home with questions that address the effectiveness of the method (paper or electronically).
- 3. Note areas that did not flow smoothly during the method and determine ways to enhance these areas.
- 4. Compile test questions for use on the next exam.

Appendix 4. Additional Directions for the Expert Teams Alternative

Case Presentation: The small teams will register for and present a case from the text. The presentation will be 18 minutes presenting the basics of the case, outside research, recommendations and solutions, among other information that you choose to include (e.g., incorporate related material from the chapter). After presenting the case, the instructor will engage you in a question and answer session. Students are expected to email the instructor final materials two days before the presentation.

Include visuals: PowerPoint and Prezi presentations are acceptable, but other forms are also encouraged. Be sure to include images and broad talking points but limit the words to the absolute essentials (i.e., talk to us, not read to us).

Summarize/debrief the case and provide additional company research as necessary: Presenters must give a clear and concise summary of the case.

Thoroughly explain the problems that exist: Utilizing knowledge from the chapters, embed explanations with terminology and more objective rather than subjective decision-making.

Explain your recommendations and solutions: Participants should explain courses of action that management should consider and why. Synthesize and integrate information from the text, the chapters, lectures, etc. This is the most important part of the presentation requiring participants to integrate and apply information from the course.

Deliverables: Provide the instructor with all materials two nights before the scheduled presentation. Make sure to Cc all of the team members so all participants know which and that the materials were submitted.

Test Questions: As part of the presentation, teams will prepare three multiple choice (5 choices) exam questions based on the information in the case. These will be discussed at some point during the presentation, preferably integrated throughout rather than all at one time. One of the presented exam questions is likely to appear on an exam. Exam questions should also be submitted with the other materials two nights before the scheduled presentation also indicating which choice is correct.

Further Suggestions: Integrate the case with the textbook content, encourage some class involvement, have a back-up plan, practice at least two timed trial runs (in our classroom if possible to make sure all media works), keep the workload equal throughout the team, include a short video clip etc.

Alternative 3 – Theory Based

This alternative is suitable for small to medium size classes meeting face to face. Students are assigned to read the case beforehand and prepare to be called on in class. Preparation is comprised of being ready to present to the class a full application of a model presented in an earlier lecture session. Students are called on in class to apply the various analytical approaches (e.g., Porter's Five Forces) and come up with their own conclusions and recommendations. Lectures on the analytical techniques are usually interspersed between case studies and the written case exams and also follow the same format. During the called on student's presentation other students are encouraged by the professor to challenge or elaborate on the presenter's examples, analytical framework, and conclusions. After the first analytical technique is presented and discussed, the professor calls on another student to present an alternative technique.

Examples of analytical models might include the business plan canvasses, ratio analysis, Porter's models of competitive forces of strategy, or the value chain analysis. A full application of an analytical model would be expected to cover all the parts on the model explicitly by name, examples from the case or industry that illustrate the part, and finally use the technique to develop a conclusion leading to a recommendation for action by management. Students caught unprepared for the class discussion are penalized and students contributing are rewarded in their class participation grade. Peer and social pressures contribute to class involvement while the professor attempts to encourage the smooth flow of ideas. Please see Appendix 5 for implementation details.

Appendix 5. Implementing the Theory Based Method

Prior to implementation.

- 1. Assign a case and provide students access to the assigned case.
- 2. Provide instructions and requirements for reviewing the case prior to the day of the method.
 - a. Inform students exactly what is expected of them in preparation for and during the method.
- 3. Encourage students to determine potential questions/concerns and share them prior to the method.
- 4. Develop backup questions to ask students if discussion lags.
- 5. Develop a foolproof way to record participation of students during the method.
- 6. Create a means of obtaining student feedback after the method is complete.
 - a. This could be a questionnaire, in-class discussion, etc.
- 7. Remind students to ensure they have access to the case material during the method.

Student preparation.

- 1. Review instructions provided by the instructor.
- 2. Read and analyze the assigned case by taking notes and making sure to grasp a complete understanding of the material.

- 3. Review all models/analytical approaches such as Porter's Five Forces, the value chain analysis, and more that were presented in prior lecture sessions.
- a. Students should have a deep understanding of models/analytical approaches previously covered in the course so they can apply them to the case immediately during the method.
- 4. Be prepared to apply all models/analytical approaches to the case situation while also coming up with conclusions and recommendations that apply and can be questioned by other students.
- 5. Be prepared to discuss, question, or even challenge other student responses during the method.
- 6. Make sure to have access to the case material during the method. (This can be a physical or digital copy).

During the team based method.

1. Students were already provided instructions for how the method is going to be completed, so begin by arranging the classroom area into an appropriate space for the method.

Instructor requirements.

- 1. Direct students to sit wherever they would like in the newly arranged classroom environment.
- 2. Ask students if they have any questions before beginning the method.
- 3. Keep track of individual participation. Each student is expected to contribute to the discussion equally and to be able to elaborate and provide meaningful examples when called on.
- 4. Begin by calling on a student and asking them to present to the class a full application of any model presented in an earlier lecture session.
 - a. Feel free to include other questions here to further engage students.
- 5. Encourage discussion among participants until the topics are exhausted and thoroughly analyzed.
 - a. Again, feel free to include other questions here to further engage students.
- 6. Move on by asking another student to present an alternative analytical technique or a way that the previous student's response could be improved.
- 7. Encourage discussion among participants until the topics are exhausted.
- 8. Repeat steps 6 and 7 until most of the class has spoken, time is scarce, or topics have been exhausted.
- 9. End the activity with a discussion of the process and insights gained from applying the analytical models.
 - a. This method is also adaptable, so instructors can amend discussions to fit the context.
- 10. Ask students again if unresolved questions remain.

After the method.

- 1. Evaluate individual student performance and compile student grades.
- 2. Obtain student feedback: Students can provide feedback immediately after the method or can be sent home with questions that address the effectiveness of the method (paper or electronically).
- 3. Note areas that did not flow smoothly during the method and determine ways to enhance these areas.

Discussion and Conclusion

We incrementally contribute to the case study method pedagogical literature by first exploring the potential disconnect between current cases and learning outcomes and offering a potential shift of focus toward small business. To maximize the connectivity and engagement with today's generations of students, we advise that it is paramount to consider both the content and delivery methods of the small business case perspective. Lastly we conclude by explaining, comparing, and contrasting three alternatives that instructors may consider using in place of the more standard HBS case method. We believe our case method alternatives provide instructors with options to align their cases and contexts to varying case delivery alternatives in today's classroom. Educators may find particular value in situations where a case study approach is preferred, but the traditional Harvard model is not a perfect fit. Alternative one and alternative two tend to work well in situations where classes are a medium size and well suited for small teams. Likewise, alternative three may be a more viable alternative in classes too small to divide into multiple teams. We believe varying case method alternatives should be considered based on class sizes.

The three alternatives may also be helpful to instructors of varied class levels. While the format of alternative two and three may be more applicable to more advanced course levels, alternative one provides an option that allows even introductory-level courses to effectively incorporate a case study methodology. Likewise, the level of student engagement has been a limiting factor in the effectiveness of the HBS method. The high degree of student preparation needed to effectively incorporate the HBS method may reduce the utility of the case study methodology in courses or programs with lower levels of student engagement. In such situations, the spontaneous and engaging nature of alternative one may not only be a means of incorporating some type of case study methodology into the classroom, but may serve to increase the level of interest and engagement of students.

Also worth noting is the variance of the alternatives presented above in terms of the level of class time and instructor preparation involved. An instructor with minimal availability of class sessions to use for case studies may elect to use alternative one or alternative three due to the brevity of the formats. An instructor with greater class session time availability may consider the use of alternative two given many sessions are needed so that each team has a session/case to play the role of the experts. Similarly, instructors with minimal time to prepare may elect alternative two due to the predominantly student led usage of time. Although more time intensive, instructors could consider option three as an alternative to testing given students individually apply analytical techniques to a case.

As with any manuscript, ours is not without limitations. A more exhaustive overview of the case method and/or list of alternatives may be needed as educational methods evolve and become more complicated. Additionally, the current study did not review alternatives suitable in online or hybrid classes although we note other scholars have shed light on this need (see Watson, & Sutton, 2012; Powers, Burrows, & Powers, 2001). While these settings are important in their own right, we believe that the nature of case studies as dynamic interactions are best suited to face-to-face courses rather than other communication methods that are limited by their inherently lower fidelity levels. Despite these limitations, we believe the current study adds value to the growing body of educational literature related to case study methodology and provides instructors for useful alternatives for teaching with cases.

We set out to provide and a brief overview of the case study method and to describe three alternatives that the authors have used in undergraduate and graduate level courses. We did not intend to criticize nor discount the HBS case method but rather provide useful alternatives to instructors. We hope these alternatives prove useful as instructors continue to align case method delivery with case material and contexts.

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Business Models (and a little luck) Matter: The Case of Motown Records

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Abstract

The objective of this paper is to demonstrate how the use of an effective business model (and a little luck) made the difference between success and failure for Motown Records. The literature regarding business models and the effect of luck on company performance is reviewed. The state of the US Record Industry of the 1950's – 1980's discussed, then it is illustrated how Motown's success can be linked to the literature through a detail description of the life events of Motown's founder, Berry Gordy. In the end, it is proposed that a business model comprised of a working operation's plan along with a business plan that includes financial numbers that work, and mediated by luck will lead to business success.

Keywords: Business Models, Luck, Company Performance, Motown, Berry Gordy, Operations Plan

Introduction

Magretta (2002, p. 91) suggests a Business Model is a description of "how the pieces of a business fit together." Creating a Business Model is analogous to telling a story. There are two parts to the story, one involving the designing and making of a product, and one involving selling and delivering the product or service. When Business Models fail, it is because they either do not make sense or the financial numbers just don't add up. Spiegel, Abbassi, Zylka, Schlagwein, Fischbach, and Schoder (2016, p.439) posit that successful Business Models need to be executed and modified by "capable entrepreneurs" in response to changes in the external environment.

Keane (2017, p.54) proposes that start-up business success is contingent on having a good business plan, but that luck plays a part as well. Klein (2014, p. 13) contends that luck is not random. Rather, it is "a behavior that successful people employ."

In this paper, we look at the experiences of a prominent independent record company, based in the US, during the 1950's through the early 1980's, as supporting evidence for these concepts. The company, Motown Records, is presented through the life story of their founder, Berry Gordy (BG), based on his autobiography. Motown had a clear Business Model developed through the life experiences of BG. This resulted in financial success for the founder as well as the artists recording at Motown. This was generally not the case for independent record companies of the period.

The paper presents a literature review of the key concepts mentioned above. This is followed by an investigation of the evidence from the US Record Industry of the 1950's through the 1980's, centering on Motown Records. Finally, we discuss how the evidence provided through the Motown story demonstrates that Business Models, mediated by luck, can lead to business success.

Literature Review

Business Models

Examination of the literature to define business models reveals that a universal definition has yet to be collectively adopted by researchers and business strategists. In her pursuit to define Business Models, Ovans uncovered several definitions, including those posited by Magretta (2002, p. 2), Drucker (1994) and others, focusing on the premise that the business model is a firm's strategy to make money. Most specifically, she cites Peter Drucker's definition of business model as "assumptions about what a company gets paid for" (2015, p.2).

As noted above, Margretta (2002) discusses the concept of business models as analogous to storytelling. There are two distinct chapters to the story. Chapter 1 deals with all of the processes required to create the product. Chapter 2 reports on delivering the product or service to the customer. Ovans (2015, p.3) in reviewing Margretta's work refers to this as a "value chain" approach.

Casadesus-Masanell and Heilbron (2015, p.4) provide a comprehensive definition of Business Models as "a collection of decisions enforced by the authority of the firm on its employees." Further, they posit that the two aspects of a Business Model are: 1. The internal organization of the firm; and 2. how the firm aligns with the external environment. Finally, these factors are the result of how authority is distributed within the firm.

In her compilation of business model research, Currie shares researchers Sheddon, et.al, conclusions that business model is often confused with the term strategy. Their emanation of the literature finds that business models typically focus inward and how the organization creates value whereas strategy is focused outward on competitive positioning (2004, p. 12).

According to Jansen and Jagers, the term "business model" came out of the "internet boom". They state that at the time of the intern boom, organizations believed they didn't need a strategy or special competency or even any customers, it just needed a web-based business model that promised profits in the unidentified future. Their research also concluded that there are many different definitions of business models but no single dominant model (2007, p. 15).

While the universally accepted definition of business models has yet to be agreed upon in examination of the literature, the investigation of business models led to the discovery of a multitude of research conducted on the concept of business model innovation. Researchers, using the broad definition that business models focus on product or service innovation, have identified opportunities to modify and contemporize their business models in an effort to further create customer value. In their research of business model patterns Luttgens and Diener concluded that businesses need to go beyond innovating their products, of which they have gained substantial experience, they also need to innovate their business model to remain relevant due to advances in technology and economic challenges (2016, p 2). Businesses need to expand their innovation beyond products and services to develop value creation for their customers and stakeholders. Businesses are now engaging in business model innovation (BMI) to identify new growth opportunities through alternative strategies to create value (Wahmare, R., Golhar, D., 2017).

In their research to study small entrepreneurial firms use of innovative business models and their effect on performance, specifically in the New York winery segment, Brannon and Wilund discovered that the more innovative the firm's business model, the higher the performance of the firm. Contributing to the innovation of the firm's business model, their research indicated that the more extensive a firm's customer innovation process, the more innovative the business model and the more extensive the level of experimentation in the firm, the more innovative the business model (2016, p. 14-15).

Research conducted on the creative industry (advertising, agency) by Preifer, Peterka, Suncica and Stanic, conclude "Personal and intensive relationship with the customer, intellectual capital as the main resource, and 'creativity or idea-centered' costs seem to be stable components of micro business models. These components reflect the standard or the mainstream business models of any service business that is mainly niche-oriented, differentiated and intensively immersed in relationships with customers. In contrast, entrepreneurs' choices related to value proposition, customer targets, channels of distribution, organization of key activities, partnership arrangements, and revenue streams seem to be differentiated. These components shape and drive the diversity of business models in creative services" (2017, p.13).

In their research to understand why some internet businesses become a success and influence millions while many more fail, Spiegel, et. al, (2016, p. 19), conclude that, "business models of early stage internet start-ups are highly dynamic and continually changing; in fact, the business model is only developed in this stage. Start-up success is not a predetermined function of opportunity identification and the 'right idea'; rather, such success is the result of a very dynamic process of business model iteration and validation."

Pilot Mountain Pride food hub, a non-profit LLC is now closed. According to their examination of Pilot Mountain, Barham, et. al (2017 p.4), determined that the lack of a viable business model contributed to hub's failure. The original business model did not account for and was unprepared for the demand of increased sales which included new equipment and trained employees which the business model did not taken into consideration when it was created.

Through his investigation of small business success and its relationship to its business models, Pentilla concludes that business models must be flexible for the organization to remain successful. "Just like the science of evolution is based on a series of very small, incremental changes that happen over the long run, customers don't have to notice the evolution of your business model overnight. In the end, your business model is all about the journey, not a destination." (2006, p. 81).

The Role of Luck

Luck, defined as a force that brings good fortune or adversity and as the events or circumstances that operator for or against (Merriam Webster, 2018), has been studied by researchers worldwide to understand its role, if any, in business outcomes, individual opportunities, success and/or failures. While a definitive conclusion regarding the role of luck in success cannot be derived from the research, there are various perspectives from psychologists, researchers, and the recipients of success that luck played a factor in a successful outcome.

In their research of small and medium Malaysian entrepreneurs, Ong, Ismail, and Goh (2010, p. 373-374), found that entrepreneurship and luck do provide a competitive advantage

for the small and medium entrepreneurs. The results of their research suggest that entrepreneurs cultivate a flexible and adaptable organization in order to benefit from different types of luck. In his case analysis study, Prabhakar, determined that the role of luck in a leader's success is not scientifically proven but many leaders do advocate the efficacy of the luck factor behind a leader's success (2016, p. 4).

In her analysis of several successful people in different fields, Fierman and Carvell found that while most people contend their success was of their own making, many people do believe luck played a role in their lives and ultimately the success they had in it. In an interview with economist William Sharpe, 61, who won a 1990 Nobel prize for his research on how to price risky assets, he stated that **luck** ultimately elevated him above his peers. "There are lots of people who are just as smart and worked just as hard as I did," says Sharpe. "But they picked topics that were intractable or may not have had sweeping enough implications." (1995, p. 150).

Through her study of luck, Klein uncovered a theme by psychologists that suggested "luck isn't a random, uncontrollable phenomenon but a behavior that successful people employ". Her research included the perspective of British psychologist Richard Wiseman, who studies luck and unlucky people, and contends, "People who consider themselves lucky have a way of dealing with chaos and complexity that unlucky people do not, Wiseman says. And chaos and complexity are two things in abundance in any startup business." (2014, p.13).

Barney concludes that organizations that obtain information, possibly in the area of competitive strategy information that was not strategically sought out but rather "stumbled" upon which they may achieve a competitive advantage is a firm's good fortune and luck and not skill in evaluating return on potential strategies (1986, p. 1239).

Keane contends that patience, a financial plan, and strong people resources are necessary to achieve a success start-up business. In addition, he states, "Perhaps it's being in the right place at the right time, getting the timing right on investments, avoiding downturns and collapses, meeting great people to help as mentors, or simply getting a good education. Luck chooses its targets but having a plan and doing something with your money today gives you a better chance of luck finding you." (2017, p. 54).

In his analysis of luck versus business luck, Peabody states that, "luck in business can be created, whereas everyday luck cannot. You can't will yourself to find \$20 on the sidewalk. But you can create a company that gets lucky more often than the average company. Indeed, there is a pseudo-scientific formula for creating business luck. The key element is this: Lucky things happen to entrepreneurs who start fundamentally innovative, morally compelling, and philosophically positive companies (2005, p. 50).

Supporting Evidence

In this section, we investigate the story of Motown Records. We begin with a brief description of the US Record Industry 1950 – 1980. This is followed by the story of Motown embedded in the biographical sketch of their founder: Berry Gordy.

US Record Industry 1950 – 1980

The Post WWII Record Industry in the US was a hodge-podge of players including major record companies, independent recording studios, publishing companies, radio stations, record pressing companies, regional and national distributors and finally record stores

(Murphy, 2014). Recordings were made on acetate masters by the recording studios. These recordings were then sent to a record pressing company to make the actual records. Samples were passed along to the radio stations for airplay to generate consumer demand. Ideally, the music was copyrighted by the publishers, allowing for licensing to other artists who chose to make their own recordings of the same song, and provide another revenue stream for the owner of the copyright. The records were sold to distributors who in turn found placement for the records in record outlets wherever they might be. At each step of the way, there were often intermediaries that facilitate the movement of the recordings to from step to step.

While the major companies, such as Columbia, RCA, Capital, MGM, and Mercury had diversified vertically to cover all of these steps in the supply chain, smaller companies had to work the system (Denisoff, 1986). Some of the mid-size companies, such as Chess, RPM/Modern and others depended on independent studios to scout out talent and provide the masters for their processing and marketing. In fact, Denisoff (1986), suggests that the majors were not all that successful at identifying new talent. As a result, they resorted to cherry picking talent from the independents and medium size companies.

There were as many as 1,000 independent labels. Some were the starting point for many famous artists, yet rarely did they develop into highly profitable enterprises. Sun Records, in Memphis, TN, for instance, was the launching pad for such performers as Elvis Presley, Carl Perkins, Johnny Cash, Roy Orbison and Jerry Lee Lewis and others. However, when the company was sold 1969 by its founder Sam Phillips, it garnered only \$1 million (Guralnick, 2015). This was largely due to bad business deals made during the course of its existences. In contrast, Motown Records, which will be discussed later, was sold by its founder for \$61 million in 1988 (Gordy, 1994).

Each of these entities in the chain took their cut of revenues along the way, which greatly diminished the profits of the independents who were at the very bottom of the chain. Further, the cycle time from recording to payment from distributors was often prolonged, resulting in cash flow issues. Consequently, many industry insiders referred to it as "crap Shoot" (Denisoff, 1986, p. 80). Only about 20% of the releases turned out to be profitable in the end. The majors were able to play the game due to their massive corporate resources.

The major record companies concentrated on "pop" music which was favored by White audiences. "Race music", the term given to Rhythm and Blues (R&B), was left to the independent labels. According to Denisoff (1986), "Only You" by the Platters was the lone R&B record to make the Billboard top 25 list. The emergence of White artists such as Elvis Presley, and Rock and Roll (R&R), which blurred the lines between "pop" and "R&B", changed the entire layout of the market.

Compensation paid to artists was at best inequitable. Independents often signed personal service contracts with artists for a fixed percentage of gross income, including those resulting from "personal appearances, stage engagements, recording contracts". In return, the artists would receive "exclusive guidance, advice and recording services" (Guralnick, 2015, p. 117). Major record companies were able to offer large upfront signing bonuses, in the thousands of dollars, in addition to providing the full range of services

If the artist was a member of the American Federation of Musicians (AFM), additional compensation in the form of per copy of records produced was paid as well. Royalties were paid based on plays on radio stations and/or licensing agreements with other artists creating their own recordings of copyrighted material. The royalties were governed by the American

Society of Composers, Authors, and Publishers (ASCAP) or Broadcast Music Inc. (BMI). Royalties were contingent on the copyright being filed to begin with. There were many examples where this did not occur.

Talent managers became the intermediaries between the artists and the record companies, taking over the responsibility of negotiating contracts. If the contract was with an independent record company, the manager would be involved with scheduling personal appearances and live performances, as well as promoting sales of records through radio outlets. Major record companies covered many of these additional services with in-house personnel.

Some 4,542 pop singles were released, industry wide, in 1955, along with 1,615 albums. Sales peaked in 1978 at \$4.1 Billion in gross revenues (Denisoff, 1986).

Motown Records

In this section, we tell Motown's story in that of its founder, Berry Gordy, as related in his autobiography, *To Be Loved*. Many facts are confirmed though various *Detroit Free Press* and *Billboard* articles listed in the Bibliography as well as Posner (2002).

Berry Gordy (BG) was born on November 28, 1929 in Detroit, Michigan. He was the seventh of eight children. BG's father had fought in WWII, then took up farming in a small town in Georgia. BG's mother was a local school teacher. One day his father sold some timber stumps for \$2,600 and afraid that Whites in the area might try to steal it from him, he took off to Detroit. After he established himself, he sent for his wife and family.

BG's father wanted his own business as opposed to working in the auto assembly plants that were now starting to flourish. He found a small, failing grocery store on Detroit's East side and eventually turned it into a profitable business. He also started a construction business, Gordy Contractors. BG's mother studied Retail Management at Wayne State University and took Business Courses at the University of Michigan (Posner, 2002). The Gordy children were involved in the businesses from an early age. Additionally, the Gordy's were all required to contribute \$10 per month to a family kitty to help fund new business opportunities that the family might wish to develop.

The Gordy family was the only "colored" family in the neighborhood to own a commercial building. Accordingly, they were held in high esteem. The Gordy children were taught to be humble nonetheless. "Pop" loved serving the people. He sold products for the lowest prices he could afford. His motto was "The customer is always right."

BG considered himself to the "black sheep" of the family and yet still had innate confidence that he would someday do great things. He learned to play the piano from his uncle. He most liked songs with a meaning to him, songs like those sang by the Ink Spots and Mills Brothers. These songs, with "clear, simple lyrical concepts" (Gordy, 1994, p. 32) became the core of his song writing style. He ultimately picked up the clarinet in high school. He worked hard at it, but was kicked out of class due to his reputation as a trouble maker.

During summer breaks and weekends, BG worked in his father's construction business as a plasterer, a job he hated. If they ran out of materials or there was no contract work to be done, his father created work for them. BG tried to convince his father to let him create a work plan. If they ran out of materials, the whole crew of four would be idle. No amount of

odd jobs made up this deficit. One summer, he was finally left in charge. He created his plan. This allowed him to purchase materials for when prices were favorable and stock pile them for use when needed. They were ahead of schedule and under budget when his father returned.

During his high school years, BG was involved in various business enterprises on his own. These included shoe shining, selling newspapers and music. Working with a friend, Lloyd Sims, they went door to door singing to anyone who would listen. BG suggested that their success was more related to Sims' singing that BG's piano playing. While BG wanted to sing like Nat King Cole, his voice was more of a cross between Billy Eckstine and Donald Duck.

BG turned to boxing, learning his craft at Eddie Fuch's Gym. He did well enough that he quit school and went into pro boxing. On November19, 1948, he even fought on the undercard for a Joe Louis fight. His pro career consisted of 15 fights, of which he won 10 (four by knockout), 3 losses, and 2 draws. The boxing career ended in August, 1950, when he saw a poster announcing a battle of the bands between Stan Kenton and Duke Ellington. He realized that music was the direction he wanted to go in.

He began writing songs. Among his first successes was a jingle for a radio ad for Gordy Print Shop, a store ran by his siblings. Almost immediately, his efforts were interrupted by the Korean War. He tried out for Special Services which would allow him to be part of a military band, but was not accepted. He became a chaplain's assistant, playing the organ for services and driving the chaplain's jeep.

Returning home in 1953, BG opened a jazz record store with one of his friends, Billy Davis. BG's father and brother George invested in the business. The business failed due to the fact that customers were now looking for Blues, not jazz. The supply of jazz records was controlled by a distributor call the Mad Russian. The Mad Russian wanted to sell in bulk. BG figured this out, and started investing in full cases. The business boomed, but the outstanding debt was too much for the business to withstand.

After the business closed, BG tried his hand at selling Guardian Service Cookware door to door, soon returning to full time song writing. By this time, he was now married to Thelma Coleman. Their daughter, Joy, was born in August of 1954, followed by a son, Berry IV, and later a third son, Terry. Again, he was forced to go back to work. His mother-in-law had connections with the Union who was able to get him a job at the Ford Foundry. This lasted one day. Three weeks later, he found a job at the Lincoln-Mercury assembly plant. BG learned the job quickly, giving him time to write songs. He devised a code to covert melody to numbers. He worked overtime whenever it was offered. This job lasted two years. He had saved money and built a portfolio of songs. He decided to return to full time song writing again.

The experience at the Lincoln-Mercury assembly plant left lasting impressions on BG. He observed how cars started out as a frame, moving down the assembly line, until they emerged as finished products, cars ready to be driven off. Quality control inspected the cars at each step along the assembly line so that the finished product met established standards.

In his new life, BG wrote songs during the day and hung out with music people in bars and clubs at night. He met Al Green and started writing for the artists that Al managed as well as others including Frances Benett, Freda Payne, Etta James, and Jackie Wilson on the Pearl label. Jackie's "Reet Petite" was BG's first hit. When BG's songs were released, his

songs were only on the A Side of the records, which diminished his returns on the records. He finally told Pearl that if he could not bet the B Side as well, there would be no more tunes for Jackie Wilson.

Things with Thelma began to deteriorate and ultimately ended in divorce. The day he was served with the divorce papers, he sat down and wrote "To Be Loved." The song would later become a hit for Jackie Wilson.

BG stated publishing songs, when he could not get royalties for songs that were recorded. He was advised by his lawyer that it would cost more to sue than he'd get in a settlement. BG's publishing company was named "Jobete," a combination of the names of his children Joy, Berry and Terry (p.101).

William "Smokey" Robinson and BG first met in 1957. He was singing with a group called the Matadors. Smokey had written a few songs and asked BG to review them. In 1958, Smokey returned with a new composition, "I got a job," an answer to the Silhouettes "Get a job." The two worked on the song. Ultimately, the Matadors recorded "I got a job" and "My Momma done told me." BG suggested that group needed a name change. Possible names were put in a hat and "Miracles" was drawn. The record was released on February 19, 1958 on the End's label. After the release, BG took over management for the Miracles. This was short lived as mistakes were made and even BG knew that he had much to learn in this area. When the first royalty check for "I got a job" came in, it was for a grand total of \$3.19. Smokey suggested that he might as well start his own record label.

BG's sister Gwen, along with his collaborator and friend, Roquel Davis started Anna Records. They built a relationship with Chess Records from Chicago to distribute their records nationally. With the business growing, they asked BG to be president. Based on his prior experience record store experience, and losing his brother George's investment, he declined.

He also started booking time at United Sound Studios to record songs for whomever might show up. One night, Marv Johnson came in and recorded "Come to Me". BG wanted to release the cut, but he needed \$1,000 to cover the costs. His brother, Fuller, suggested that he get the money from the family kitty. He needed to get a 100% agreement of all family members, including George. When asked what his plan was for the company, he had to admit that he had no plan. Ultimately, the family voted him a loan of \$800, to be repaid, including \$48 interest, within two years. The TAMLA label was launched. "Come to Me" was released in May, 1959. A long-term deal to create masters for Marv Johnson was signed, with United Artists (UA) doing the distribution.

It wasn't long until the Motown label was launched. The name was based on Detroit being the "motor city". The plan was to put solos on TAMLA and groups on Motown. In the end, this turned out to be impractical. The first release was Smokey Robinson and the Miracles' "Bad Girl." BG made several attempts to place the song nationally through UA and ABC Paramount Records with no success. Chess ultimately purchased the record as part of a six master package from several artists, and the record was released on August 30, 1959.

During this time, the Miracles were booked at the Apollo in New York City. The performance was a total disaster. The house band required full scores, but the Miracles only had basic cords. Ray Charles stepped in to assist or the performance would not have happened. Smokey had added some dance steps for the group, but they were all but laughed

off. Gwenn suggested that an artist development department was needed to prevent this from happening again.

BG and his new family, including Raynoma (Ray) Liles, his 2nd wife, moved into 2648 Grand Boulevard in late 1959. This became Hitsville, USA. The garage was turned into a recording studio. The first floor became the lobby. The family quarters were on the second floor. The first major hit, recorded at Hitsville was "Money," TAMLA 54027, by Barrett Strong. It was distributed under Anna Records through Chess. Although this was not best financial arrangement for BG, he felt that he owed it to Gwen.

The principles learned at the Lincoln-Mercury assembly plant, discussed earlier, were at the core of BG's business model for Motown. His mission was to build an organization where artists would walk in off the street and walk out as stars in the recording industry. He envisioned three strategic pillars: 1. Create – this included composing, producing and recording music; 2. Make – this was the actual manufacturing of the records to the distribution end users; 3. Sell – this was the relationship building activities with distributors, radio stations and included all marketing and promotion acuities. A fourth function was later added out of necessity – Collect. This was followed by three more: Pay, Save, and Reinvest.

BG started putting the Motown organization together. William Mickey Stevenson was hired as the Artist & Repertoire Director, in charge of creative activities. The house band was formed, the Funk Brothers. Sisters Gwen and Anna became costume designers. Maxine Powell of Maxine Powell's Finishing School joined the team to work with female performers, concentrating on such things as basic table manners, make-up and public comportment. Cholly Atkins of Coles & Atkins Choreography taught basic dance steps, entrance and exits. Maurice King became the Music Director, developing full scores and coaching the artists on harmony.

International Talent Management, Inc. was established under sister Esther. Their focus was to arrange for personal appearances, negotiate with booking agents and work with the artists to make sure that they took care of personal business like paying taxes.

As the business developed, a Quality Control process was established. Various producer groups that arose in the operation, included Brian and Eddie Holland and Lamount Dozier (HDH), Norman Whitfield, and others would submit final mixes to Billie Jean Brown for review. If they made it past Billie Jean's review, they were submitted to Friday morning meetings. These meetings included everybody included artists under contract, composers and producers. All opinions were welcome with the objective of helping to improve the recordings. In the end, a single question was asked: "If you were hungry and only had one dollar would you buy this record or a hot dog?"

The system was set up to ensure that every cent owed to artists was paid. At the same time, all expenses, such as session time, were charged. Overbillings, and under-crediting of earnings were prevented by safeguards implemented by BG.

The operation became so successful that hits were being produced quicker than cash could be collected. Mary Wells, the Temptations, the Supremes, Stevie Wonder and the Four Tops, to name just a few all came onboard. By the summer of 1961, things came to near crisis level. Motown could not pay pressing plants and suppliers before getting paid by the distributors. Luckily, "Please Mister Postman" became a national hit. BG was able to withhold records from the distributors until they paid back invoices. The distributors found the money.

Motown expanded internationally to Europe in 1963 as TAMLA-MOTOWN with EMI doing the distribution. TAMLA was already well known outside the US.

The first issues with artists began to occur in 1964. Mary Wells walked out on her contract. It was argued that she was under 21 when signed the contract and was not properly represented. In the end, Motown received royalties on all of her work for the three remaining years of the contract. This was followed by Marvin Gaye walking out after BG had called him "boy". Marvin Gaye would later returned.

On the personal front BG, had now divorced Ray, although she remained a Motown employee until she was arrested for bootlegging Motown records in New York. She continued to work for Motown on and off again for years to follow. Several affairs followed, including the most long lasting one with Diana Ross. Between the marriages and affairs, BG had eight children.

In 1968, the HDH trio of producers announced that they were leaving Motown. BG sued them for \$4 million due to breach of contract. They counter sued for \$22 million suggesting that BG had not been fair to the artists and producers working at Motown. Smokey Robinson wrote an OPED column vehemently denying allegations of cheating the artists. The suits were ultimately settled in 1972 with no clear winners.

Rumors began to surface regarding connections between Motown and the Mafia. BG attributed this to a story in a small neighborhood newspaper. Barney Ales, the Motown Sales Manager, was Italian, which served to inflame the situation. The FBI investigated. No evidence substantiating the allegations were ever found. BG suggested that it could be related to racism in stating, ""How could one of the most successful independent record companies in the world be owned and operated by a Black man without being crooked?" (p. 270).

Finally, in 1968, Motown opened a new office with a recording studio in Los Angeles. This sparked the beginning of the end. As BG put it, the last stars to come down the assembly line were the Jackson 5. Their inaugural release was on August 11, 1969. While more hits were released by the core crew of artists including Stevie Wonder, Marvin Gaye, the Temptations and others, there would be no other big names to add to the Motown portfolio.

Motown Records announced that its headquarters was relocating to Los Angeles on June 14, 1972. The company was restructured as a holding company under the name of Motown Industries. BG was the Chairman. He too had relocated to LA by this time.

BG turned most of his focus to movies. He produced "Lady Sings the Blues," starring Diana Ross and Billy Dee Williams, which opened in 1972. The movie was nominated for five Academy Awards. More movies would follow including "Bingo Long Traveling All Stars," "Motor Kings," "Scott Joplin," "The Wiz," and "Mahogany."

The Jackson 5 left for CBS in 1975. The last Motown record to break the Top 10 was the Commodores' "Three Times a Lady" in 1978. Faced with bankruptcy in 1980, Smokey Robinson, Diana Ross, Stevie Wonder, Lionel Richie and Rick James record sales helped keep the company afloat. Explaining the fall off in business, BG (Gordy, 1994, p. 50) stated: "It wasn't the technology and the changing world. The world had been changing since the day I was born. The real reason was I was just tired. I didn't want to do it anymore. It had long stopped being fun for me." Further, he noted that at the outset, the business was 90% creative and 10% business. Now, it was 98% business and only 2% creative.

In 1983, BG signed a distribution contract with MCA and ultimately sold the company to MCA on June 29, 1988 for \$61 million. While most of the artists had moved on by that time, Smokey Robinson and Stevie Wonder were loyal to the end.

BG is still alive and living in California to day.

Additional Quotes from Berry Gordy (1994):

"It's what's in the grooves that counts." (p. 4)

On the Cycle of Success: "People treat you differently, you treat people differently, you have newfound friends, newfound relatives, newfound business deals, newfound everything. You're expected to pay – bills, commissions, taxes. You expect more respect from family & close friends. Those who really know and love you see you as you as the same person you were – and are. However, your accomplishments are just that, not you. When you are a star, you spend like a star. On the positive side, the sky became a start and not the goal. (p.87)

"Being at the right place at the right time is a major factor in all of our lives. Luck plays a part in everything." (p. 16)

Discussion

Jacobs (2007, p.105) posits that studying the life stories of "important thinkers and practitioners" can help us establish the link between theory and practice. While we might not necessarily classify BG and an important thinker, we clearly can classify him as an important practitioner. Accordingly, through our analysis of Business Model theory, it is appropriate to draw the linkage between the extant literature and the experiences of BG and Motown.

We propose that the "capable entrepreneur" standard suggested by Spiegel, et al. (2016, p. 19) is met in BG. While he did not have a formal education, he learned experientially, working within the family businesses. His illustration of his planning activity in his father plastering business supports this point. The lessons learned in the family business were supplemented during his time working on the assembly line became the basis for his Business Model implemented at Motown. His execution and modification of the model was exhibited in evolution of the Motown organization as it grew from a single studio in the garage of his personal residence to an international enterprise with offices in New York and Los Angeles as well as Detroit.

Luttgens and Diener (2016, p. 2) requirement that businesses expand innovation beyond products and services to develop value creation for their customers and stakeholders was clearly met in the assembly line approach to developing talent along with the management services provided to them. It was not common for independent record companies to provide voice coaches, choreographers, costume designers, talent managers and other services for their artists. This added to the earning capacity of the performers, while at the same time providing a more enjoyable entertainment experience for the public.

In considering Brannon and Wilund's (2016, p. 14-5) findings that the more extensive the level of experimentation in the firm, the more innovative the business model, we need only to look at the Friday Quality Control Meetings as confirmation of the application of this concept to Motown. The composer/production teams such as HDH that experimented with new talent. Group reviews at the meetings helped provide critical review of the work and

identify records most likely to be commercial successes. The transition into films in the later days of the company is further evidence of this trait.

From BG's perspective luck played a big role in Motown's success. He mentions this throughout his autobiography. He cited being in the right place at the right time as evidence of this. As noted in the Literature Review, Wiseman suggested that "lucky" people deal with chaos and complexity differently than "unlucky" people do. It is not clear if BG considered himself lucky as opposed to Motown being lucky. However, it seems likely that he considered Motown and himself to be one in the same.

Magretta's (2002, p. 2) assertion that Business Models fail due to not making sense or the numbers not adding up is perhaps illustrated in Motown at both ends of the spectrum. There is little doubt the Business Model made sense. For the better part of 30 years, the numbers made sense. It was not until BG lost interest in the business that business suffered financially to point of failure.

In Motown's case, the luck was more likely related to the collaborative culture which existed, rather than the talents of a single individual. Family members were involved in key management roles in the organization. The entire team, working together, to make decisions on new talent and helping to develop the talent, created the environment where chaos and complexity were diminished, in spite of the organizations size. In any event, the Motown story presents evidence that luck can be a mitigating factor in the success or failure of a company.

Conclusion

In this paper, we have investigated the story of Motown Records in light of extant theory regarding Business Models. There is a clear indication that Motown's success was heavily linked to their Business Model, the creation of its founder. However, much of the success can be traced back to a collaborative culture which existed in the company.

There are some implications for entrepreneurs suggested in this analysis. First, it is not enough to be an expert in the field in which a company is formed. Just because one is a good cook does not mean that they will be a successful restaurateur. A strong business model is a key start-up success. Secondly, luck plays a part in the success or failure of all businesses. However, in the words of Keane (2017, p. 54), "Luck chooses its targets but having a plan and doing something with your money today gives you a better chance of luck finding you."

Future research into this topic might center on companies, especially those in the Record Industry in the period covered by this paper, and who failed due to lack of a clear Business Model. By using the critical biography approach and comparing these stories to that of Motown, the necessity of a strong business model might be even more clearly illustrated. Indeed, the story of Sun Records, referred to earlier, fits into this category.

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Management and Ownership Transfer: The Case of Mid-Western Family Businesses

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Abstract

This study aims to separate the succession process into the two distinct but related processes of management transfer and ownership transfer. We contribute empirically to the literature by modeling these two components, with a bivariate ordered probit regression, as separate but interrelated processes. Management and ownership transfer were influenced by business, family, and ownership characteristics within family businesses. Family businesses that discussed goals, identified a successor, and were educated on how to start the transfer process were more likely to have made progress in both management and ownership transfer.

Keywords: succession, family business, ownership transfer, management transfer

Introduction

Succession in family businesses can undoubtedly be overwhelming (Bjuggren and Sund, 2001). It is a story often told when studying family business succession: less than 30% of businesses last into the second generation, and a mere 10% are able to sustain into the third generation of the family business (Giarmarco, 2012; Lambrecht, 2005; Sharma et al., 2001). In the United States, over 90% of family business owner-managers yearn to pass their family business to the next generation, ultimately keeping the control of the business in the family (Calus and Van Huylenbroeck, 2008; Dumas et al., 1995; Sharma et al., 2001; Sharma, 2011). This is particularly true for family businesses in agriculture where transgenerational transfer is a primary business goal. Yet, Wiatt and Marshall (2017) and Mishra and El-Osta (2007) found that the majority of these family businesses were not prepared for succession. Ultimately, this lack of planning can end up costing family businesses a great amount, in the form of taxes and family disharmony that can stem from the uncertainty that accompanies unplanned transitions (Bjuggren and Sund, 2001). Taking pointed steps in succession

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planning can end with a great amount of intellectual capital being transferred from one generation to the next (Bracci and Vagnoni, 2011).

The succession process contains three separate components, two of which can transpire concurrently or asynchronously (Giarmarco, 2012). The process includes a managerial leadership component in which the management decisions of the business transfer from one generation to the next, an ownership component in which the financial possession of the business is transferred, and lastly the transfer tax component (Churchill and Hatten, 1997; Giarmarco, 2012; Mishra and El-Osta, 2007; Morris et al., 1996). However, overwhelmingly in the literature, the term "succession" refers directly to management or leadership transfer, which has led to research of management transfer to overshadow research on ownership transfer (Sund et al., 2015).

Ownership transfer (Churchill and Hatten, 1997; Kimhi, 1997) and managerial leadership transfer (Churchill and Hatten, 1997; Mishra and El-Osta, 2007; Morris et al., 1996; Pontet et al., 2007) are two of the major components of succession planning for family businesses. Past studies have researched family business succession as one process while recognizing that both ownership and management must be transferred for a successful succession. Sund et al. (2015) state it best: "the interdependencies, similarities and differences between management and ownership succession have received little attention" (pg. 166). This study integrates the full succession process as a combination of ownership and management transfer. We contribute empirically to the literature by modeling the two components (ownership and management transfer) as separate but interrelated processes. We use a bivariate ordered probit model, an approach not yet applied to ownership and management transfer estimation, as a way to estimate effects of family and business characteristics on the separate but simultaneous processes of management transfer and ownership transfer.

Literature Review

Succession Planning

Dunn (1999) found that even though family businesses are heterogeneous, the succession issues that they face remain predictable. Business owners are often financially and emotionally tied to their family businesses, so succession can consume a large amount of time and resources. The effects of succession can resonate not only with the owner's finances but also with his or her psychological state of mind (Filser et al., 2013). Thus, some incumbent owners may have difficulty letting go of their business (De Massis et al., 2008; Gilding et al., 2015).

Koffi et al. (2014) noted that the majority of family businesses would transfer from the older to younger generation in the next 10 years. Giarmarco (2012) explained that the succession process was more difficult when owners had more than one child, especially when some were active in the business and others were not. Equality was very important to many of the business owners, often prompting them to reward those children active in the business while not estranging those who were not. An option for such owners was to include non-active children solely in an ownership role, while leaving the active children in an ownership and management role. Uncertainty in the succession process decreased when the owner wrote down succession plans, especially when those plans included allowance of children to stay active in the business after it transitions in both management and ownership. Beckhard and Dyer Jr. (1983) found that even when family members do not want an active role in the ownership or management of the business, they still felt entitled to a share of the business' wealth or power when transition occurred.

Conflict and tension could greatly affect the succession process and how parties view their family business succession before, during, and after the process has occurred (De Massis et al., 2008). Filser et al. (2013) noted that it should not be assumed that successors' and incumbents' goals within the succession process are aligned, and this misalignment could cause conflict and tension within the family business. Filser et al. (2013) found that communicating the succession plans within the family business earlier could have many positive effects. Starting communication of the succession process early would give the business more time to openly plan for succession. Vozikis et al. (2012) found that ambiguity between the incumbent and the successor inhibited succession in the family firm. Moreover, Dyck et al. (2002) proposed that succession would be more successful when the incumbent's and successor's skills and management styles were similar. Thus, a mentoring relationship and strong bond between the incumbent and successor are important in family business transfer (Goldberg, 1996).

Management and ownership transfer in the family business can be used as strategic processes to create viability across generations in the business (Duh, 2014). Ownership and management are not required to be transferred concurrently. One case showed that an acting manager/successor began receiving shares of the family business early in her first year of the business and ownership transfer remained incomplete for another 10 years (Whatley, 2011). Whether it was management transfer, ownership transfer or strategic planning in the family business, Dunn's study (1999) found that emotional functioning followed consistent patterns. Family businesses could find ownership transfer easier to plan than management transfer. There are more advisors to guide family businesses through ownership transfer (lawyers, financial advisors, tax attorneys, etc.), while fewer advisors exist for management transfer. Family businesses may find management transfer more difficult to plan because of its personal nature, often requiring the current manager to disengage (Wiatt and Marshall, 2017).

Management Transfer

Management transfer refers to movement of the day-to-day operation and leadership of the business from one generation to the next (Giarmarco, 2012). Leadership or management transition in the family business takes detailed planning and time when executed in a professional manner (Beckhard and Dyer Jr., 1983). Business owners need to groom their candidates and shepherd them through positions of responsibility to better prepare them to take over (Bradley et al., 2012). Training successors for management transfer could take years, as could owner managers' retirement from day-to-day business operations (Giarmarco, 2012). Training through incumbents' and successors' shared experiences, although time consuming, could hold the key to a successful management transfer. This unique training could not only allow skill transfer but also knowledge transfer to occur before the management torch changed hands (Cabrera-Suarez, 2005).

High levels of anxiety stemmed from transition in the family business (Dunn, 1999). Thus, quality of relationships between incumbents and potential successors was imperative to successful management transfer in family businesses (Cabrera-Suarez, 2005); and could aid in offsetting the anxiety and tension that stemmed from transfer. Barach and Ganitsk (1995) found that it was vital for the incumbent of the family business to emphasize to the successor that his or her happiness, whether or not that meant being part of the family business, was more important than their activity in the business. Quality of communication was important to the family business and its management transfer (Cabrera-Suarez, 2005), as was trust and affability (Morris et al., 1997).

Families that had more prepared successors experienced a smoother management transfer (Morris et al., 1997). Incumbents and successors in the management transfer process

needed to be committed to the process. Sharma et al. (2003) found that the availability of a reliable successor overshadowed the desire of the incumbent to keep the business in the family. Enhancing successor skills and education eased the management transfer process in family businesses (Vozikis et al., 2012). Developing skills and gaining education made for a more efficient family business once the management was passed from incumbent to successor; self-esteem and confidence were major skills important to leading a family business (Vozikis et al., 2012).

Ownership Transfer

Ownership transfer refers to passing the financial possessions and property from one generation to the next. According PwC's 2017 US Family Business Survey, 51% of family business owners expect to transfer the ownership of the business to the next generation between 2017 and 2022. However, lack of business planning and unwillingness to hand over the business could hinder ownership transfer in family businesses. Morris et al. (1997) found that ownership transfer occurred more smoothly when family businesses were more prepared and knowledgeable about taxation and wealth transfer.

The costs associated with ownership transfer could hinder the succession process because ownership transfer is much more likely than management transfer to have tax implications (Bjuggren and Sund, 2001; Sund et al., 2015). Owners may be less reluctant to transfer business ownership if those owners would continue to reap economic benefits after the transfer (Giarmarco, 2012). Owners have some options that can allow them to exit the business but still receive income from that business, such as management buyouts and buyins (Giarmarco, 2012; Howorth et al., 2004). The timing of ownership transfer could come down to who pays – either the owner losing business income by gifting shares of the business or the inheritance costs associated with successors receiving the business upon the owner's death (Sund et al., 2015).

Ownership transfer can be costly and complicated to plan. Hines Jr. et al. (2016) found that ownership transfer occurred more frequently when market conditions were favorable. Under favorable market conditions, more assets were available to accommodate and fund the transfer. Transfer of ownership was also easier for family firms who were more successful, most likely because more resources were available for planning and structuring the business for such a transfer (Hines Jr. et al., 2016). Astrachan and Tutterow (1996) found that it cost families over 160 hours of time and over \$33,000 to plan for the estate transfer and tax implications.

Other Factors That Affect Management and Ownership Transfer

Business characteristics. According to Astrachan and Shanker (2003), roughly 60% of private and public partnerships and corporations in the U.S. are family businesses. In a family business, it is nothing short of impossible to separate the family from the business, and vice versa. Thus, spillovers between the family and the business units are common among family businesses (Zody et al., 2006). Businesses and families share many resources, including assets, income, and time. Research has shown that in sole proprietorships, resources are more often transferred from the family to the business but the opposite was found to be true for corporations (Haynes et al., 1999). Haynes et al. (1999) found that intermingling of family and business resources happened in many areas of the business. Roles of employees, family members, owners, and managers were easily distorted, making management and ownership transfer subsequently less transparent (Cabrera-Suarez, 2005; Haberman and Danes, 2007; U.S. Small Business Administration, 1991). The family component of the family business contributes to the strength of the business in many cases. A study by Basco and Rodriguez

(2009) found that family businesses had higher family functioning as compared to non-family businesses, but business function was unaffected.

Lambrecht (2005) found three motivations that inspired a successor to join the family business: 1) the successor asked to join the business, 2) the incumbent asked the successor to join the business, and 3) successors felt morally obligated to join the family business. Members of a family business preferred to have a family member as a successor over a non-kin successor (Lambrecht, 2005). De Massis et al. (2013) found that family managers gained noneconomic benefits from being in the business, and they were more inclined to focus on those benefits rather than increasing sales or the improving return on assets. Total farm assets were the lowest when family farms did not have a designated successor, were higher when the successor was uncertain, and were highest when the farm business had a successor. The presence or absence of a successor influenced investment decisions, beginning about 10 years before the farm was actually transferred (Calus et al., 2008).

Business owners who are parents tended to first look towards their own children as potential successors of their family business (Bizri, 2016). Bizri also found that family businesses strove to maintain "familial stewardship" over business growth and sustainment, even if this meant terminating the family business. This proved that decision-making for business matters in the family business had the heaviest influence from the family. Motivations related to family welfare drove many succession decisions leading to results that were not always optimal (Kihmi, 1997; Lee et al., 2003). Firm size positively impacted intentions of adult children of owners to join the family business (Stavrou, 1999).

Family characteristics. Conflict and tension in both the family and the business could transfer from one system to the other (Danes and Lee, 2004; U.S. Small Business Administration, 1991). Molly et al. (2010) found that growth of family businesses decreased when the business transferred from the first to second generation, but no such effect was found on latter transfers. There seems to be more conflict when the transfer occurs between the first and second generation than subsequent generations (Molly et al., 2010). The shadow effect may be to blame for this conflict, because the founder generation is so closely tied to the existence of the business. Owners often viewed the family business as an extension of themselves; it is often difficult to simply pass on that business to someone else to manage and own (Bradley et al., 2012; Molly et al., 2010). If not handled in a careful manner, then tensions that pre-existed the transition could become heightened (Beckhard and Dyer Jr., 1983). When family members were in top management positions within the family business, tensions were lower than in those without family in top management positions (De Massis et al., 2013).

Family functionality, measured by the APGAR (Smilkstein, 1978), was directly linked to tension in the family business. Higher APGAR scores (higher levels of functionality) were associated with lower tension levels in the family business (Danes et al., 1999). Danes et al. (2000) studied copreneurs in farm family businesses with an emphasis on tension and conflict. The findings associated positive modes of communication with lower levels of tension and negative modes with higher levels of tension. Also noted was that avoiding conflict does not eradicate tension from the family business.

Owner characteristics. The probability of succession is higher when the owner has more education (Glauben et al., 2005). Owner's age also influenced the probability of succession in farms – maximizing at age 60 then decreasing thereafter. Successor's education influenced the succession process; Goldberg (1996) found more successful successors had college degrees than their high school diploma counterparts did. Succession planning was more prevalent in second- and third-generation firms than in first-generation family businesses (Sonfield and Lussier, 2004).

Gender can play a very large role in succession decisions and how potential successors are viewed (Haberman and Danes, 2007; Koffi et al., 2014). While business owners may seem open to having a woman successor, that decision can quickly become blurred when domestic and family issues enter into the picture, especially when that business is a farm (Glover, 2014). Women owners also viewed different credibility factors of potential successors than their male counterparts did, ultimately leading to higher success rates of succession for female business owners (Koffi et al., 2014). Haberman and Danes (2007) found a case in which because of their gender, business owners overlooked daughters as successors until the daughters asked to be considered. Not surprisingly, this lack of consideration produced higher levels of tension in the family business and more goal misalignment. To contrast many other studies, gender had no influence over succession plans in Sonfield and Lussier's (2005) study.

As noted by Pontet et al. (2007), "a choice of successor is necessary, but it may not be sufficient" (pg. 340). Valuing the fit of a successor to a family business was more important than who the owner wished to succeed him or herself (Bradley et al, 2012). A successor's skills, experience, education and other key attributes, when specified unequivocally, can help guide a family business board to choose the correct successor for their business (Bradley et al., 2012). Chalus-Sauvannet et al. (2016) explored the cases in which unexpected successors emerge for a family business. In all cases, adult children had unexpectedly decided to return home to their family's business. Chalus-Sauvannet et al. (2016) deduced three broad reasons for children to return to the family business: professional reasons, personal reasons, and entrepreneurial reasons.

Conceptual Model

This research analyzes the stages management and ownership transfer in family businesses based on the *Three Circles Model*. This model demonstrates the interactions between family, ownership, and management groups within the family business (Tagiuri and Davis, 1996). The *Three Circles Model* is very effective in exhibiting how different people can fall into combinations of the three separate but intersecting circles. For example, a niece of the business owner could fall into the management and family circles. Another example is a nephew of the business owner who works outside the business, so he would fall only in the family circle. Over time, people can be in a single circle and eventually move to the intersection of all three circles – this movement is possible through the processes of management transfer and ownership transfer. A family member would only be in the family circle, but then moves into the family and management circles when management transfer takes place. The final move could be when that person gains some ownership of the business; hence being in all three circles: family, management, and ownership.

Data & Methodology

Data

The 2012 Intergenerational Farm and Non-Farm Family Business Survey, a 30-minute telephone survey of rural family businesses, provided the data for this analysis. The sample consists of a convenience sample of 2,097 small and medium-sized farms Illinois, Indiana, Michigan, and Ohio; and a random sample of 1,059 small Indiana food businesses. The final sample fielded by the University of Wisconsin Survey Center consisted of 3,156 cases from April 2011 to February 2012. Cases with no contact information were removed, leaving 2,163 viable cases. To qualify for the study as a family business, one of the following metrics had to

be met. At least one other member of the family besides the respondent had to have ownership interest in the business (86% of the sample). At least one other member of the family besides the respondent had to work at least part-time in the business (92% of the sample). The respondent inherited the business (18% of the sample). The respondent planned to transfer the business to a family member (55% of the sample). The sample contains 736 observations. The response rate was 34%. After culling for non-responses to variables of interest, our analysis contains 523 family businesses. Farms account for 68% of the family businesses in this study.

Methods

The two dependent variables studied were management transfer and ownership transfer. Ownership transfer and management transfer were measured in three distinct stages, where 1 represents that the business has not started the transfer process, 2 represents that the business has just started the transfer process or has an oral plan, and 3 represents that the business has a written plan, has started implementing the plan, or has finished transferring management or ownership. Business, family, and owner characteristics were included in the models. Table 1 (below) contains all variables, definitions, and explanations of any scales.

The binary business characteristics used to explain the aforementioned dependent variables were: having a successor identified (versus not having a successor); if future business goals were discussed quarterly or more frequently (versus not frequently discussing goals); if profit was over \$50,000 annually (versus if profit was under \$50,000); if the business was in the first generation (versus if the business was second generation or higher); if the business was a farm or agribusiness (versus businesses that were non-agricultural); if the business structure was an LLC, corporation or trust (versus a solely owned business or a partnership); if the lack of common goals was hindering the transfer of the business (versus if the business was not hindered by lack of common goals); if the owner believes that the business was unsuccessful); and if there was sufficient capital present to implement the transfer of the business (versus if there was not enough capital present to implement the transfer of the business). The continuous business characteristic included was business age.

The binary family characteristics used in this analysis were: if the intention of the business owner was to give the business to family members when he or she exits the business (versus if the business owner planned to liquidate the business), and if the intention of the business owner was to sell the business to outsiders when he or she exits the business (versus if the business owner planned to liquidate the business). The continuous family characteristics used in this analysis were: number of family members involved in the daily management, number of family members who own part of the business, and the functionality of the family business (measured in a 16-point Likert scale where 0=most dysfunctional and 16=most functional).

The binary owner's characteristics used in the model were: if the business owner invests in the business over personal finances (versus if the owner invests in personal finances before the business), if the owner wanted to bring the heirs into the business (versus if the business was not interested in bringing heirs into the business), if the owner planned to transfer the business to a family successor even if it put his or her own personal wealth and livelihood at increased risk (versus otherwise), if the owner was knowledgeable about where to start the transfer process (versus if the owner was not knowledgeable), if the owner was a female (versus male), if the owner was married (versus single or widow), and if the owner and his or her spouse were copreneurs (versus if the owner and his or her spouse were not copreneurs). The continuous owner's characteristics used in the model were: owner's years of education and owner's age.

Table 1. Variable Names and Definitions

Variable Name	Scale and Definition						
Dependent Variables	Scare and Definition						
stage of management transfer	=1 if not started; =2 if have just started or if have an oral plan; =3 if have a written plan, have started implementing the plan, or have finished transferring management						
stage of ownership transfer	=1 if not started; =2 if have just started or if have an oral plan; =3 if have a written plan, have started implementing the plan, or have finished transferring ownership						
Business Characteristics							
successor identified	=1 if business has identified a successor; =0 otherwise						
discuss business goals	=1 if future business goals are discussed on a quarterly basis or more						
frequently	frequently						
profit over \$50k	=1 if profit is over \$50,000						
business age	=age of business in 2010						
founding generation	=1 if founding generation						
farm	=1 if business specialization is agriculture, forestry, and natural						
	resources						
LLC_corp_trust	=1 if the business in structured as an LLC, a corporation, or a trust						
lack of common goals	=1 if the lack of common goals is hindering the transfer of the						
hindering transfer	business						
business is successful	=1 if the owner believes that the business is successful						
enough capital present to	=1 if there is sufficient capital present to implement the transfer of the						
transfer the business	business						
Family Characteristics							
family members in daily management	=number of family members in daily management						
family owners	=number of family members who own part of the business						
owner will give business	=1 if the intention of the business owner is to give the business to						
to family	family members when he or she exits the business						
owner will sell business to	=1 if the intention of the business owner to sell the business to						
an outsider	outsiders when he or she exits the business						
business functionality scale	16-point Likert scale of how functional a family and business interact and work with one another (0=most dysfunctional;16=most functional)						
Owner Characteristics							
owner invests in business	=1 if the business owner invests in the business before personal						
before personal finances	finances						
owner wants heirs in business	=1 if the owner has a want to bring heirs into the business						
owner will transfer	=1 if the owner plans to transfer the business to a family successor						
business even if it risks	even if it puts thier own personal wealth and livelihood at increased						
personal wealth	risk						
owner knows how to start	=1 if the owner is knowledgeable about how or where to start the						
transfer process	transfer process						
female owner	=1 if owner is female						
years of owner's education	=number of years of education of owner						
owner's age	=owner's age as of 2011						
	1 4 10 1 1						
owner is married	=1 if married =1 if owner and spouse are copreneurs						

Empirical Model

Management and ownership transfer were analyzed separately using univariate ordered probit regressions. Univariate ordered probit models are based on latent regressions, where the assumption is that errors are normally distributed (Greene, 2012). The ordered probit model had three ordered outcomes: 1 (have not started), 2 (have just started or if have an oral management transfer plan), and 3 (have a written plan, have started implementing the plan, or have finished transferring management). The ordered probit model for management (or ownership) transfer is given by the series of equations:

(1)
$$Prob(y = 1|\mathbf{x}) = \phi(\mu_1 - \mathbf{x}'\boldsymbol{\beta}) - \phi(-\mathbf{x}'\boldsymbol{\beta})$$

 $Prob(y = 2|\mathbf{x}) = \phi(\mu_2 - \mathbf{x}'\boldsymbol{\beta}) - \phi(\mu_1 - \mathbf{x}'\boldsymbol{\beta})$
 $Prob(y = 3|\mathbf{x}) = 1 - \phi(\mu_3 - \mathbf{x}'\boldsymbol{\beta})$

The following must be true for probabilities to be positive: $0 < \mu 1 < \mu 2 < \mu 3$.

Management and ownership transfer may occur concurrently in family businesses and explained by the same variables (Giarmarco, 2012). Thus, a seemingly unrelated bivariate ordered probit regression model was used to analyze the processes of management transfer and ownership transfer together. The bivariate ordered probit model encompasses the two latent variables for management transfer and ownership transfer (Sajaia, 2008). The model, which assumes that ε_1 and ε_2 are normally distributed $N(0, \Sigma)$ but not independent, is as follows:

(2)
$$Management_i = x'_{1i}\beta_1 + \varepsilon_{1i}$$

 $Ownership_i = x'_{1i}\beta_2 + \varepsilon_{2i}$

Where x denotes a vector of characteristics of family businesses.

For the seemingly unrelated bivariate ordered probit regression model with management and ownership transfer as the dependent variables, the test for endogeneity proved statistically significant with a ρ of 0.70 (P<0.01). Thus, proving that processes should be modeled together. Table 3 shows the regression results from all models, the two univariate ordered probit models and the bivariate ordered probit model which was ultimately selected for analysis.

Results & Discussion

This study investigates the qualities that influence management transfer and ownership transfer in family businesses, which Sund et al. (2015) found to be lacking in family business literature. We analyzed the management transfer process in combination with the ownership transfer process using a seemingly unrelated bivariate ordered probit regression. We find a variety of interesting results by studying the processes of management transfer and ownership transfer concurrently. While there were some variables that affected both the management transfer process and the ownership transfer process, the variables that were significant to the different processes give valuable insight into how the processes interact within family businesses.

Management transfer allows an owner to give up some responsibility without relinquishing his or her income from the business, although relinquishing control of the business can be difficult (Wiatt and Marshall, 2017). For this reason alone, we could expect different factors to facilitate and hinder the progression of the management transfer process and the ownership transfer process. Roughly 44% of family businesses in our sample had not started management transfer, and roughly 55% had not started ownership transfer. Only about

20% of family businesses had at least started writing a management transfer plan and only 17% had done so for the ownership transfer.

Succession in family businesses allows the passage of both economic and noneconomic wealth (Carr et al., 2016). Such transfers of family businesses are important. Not surprisingly, past literature found that communication of succession plans had positive effects within the business (Filset et al., 2013). Only 29% of the family businesses in this study had identified a successor for their business. Our study found that the presence of a successor progressed both management and ownership transfer, as did frequently discussing business goals. When the owner knew how and where to start the transfer process, businesses were more likely to be further along in both management and ownership transfer. Goal discussion happened on a quarterly basis or more frequently in 62% of businesses. This result points out, once again, how important the planning component of succession truly is to both management succession and ownership succession.

Ambiguity between the successor and the owner slowed the succession process (Vozikis et al., 2012). Management transfer was more likely to take place in businesses where the owner was willing to bring heirs into the business, which translates to letting go of some day-to-day decision-making and control. On the other hand, ownership transfer was positively affected when the owner had plans to give the business to family. De Massis et al. (2008) and Gilding et al. (2015) found that incumbent owners may have a difficult time letting go of his or her business. Family businesses can be very closely tied to their owners due to their highly personal time and monetary investment that they require. Roughly 72% of the family business owners in this analysis were founders of his or her family business, further tightening his or her emotional ties to the business.

We found later stages of ownership transfer are more likely as the business age and owner's age increase. Mean owner age was 55 years old, where about 72% of businesses were in their founding generation. As the owner gets closer to retirement age, it is intuitive that he or she may be more likely to start transferring ownership of the business to the next generation of owners. Glauben et al. (2005) found that succession was more likely as the owner ages, maximizing at age 60. Having more owners can cause businesses to be in later stages of ownership transfer, whether it stems from the security that the owner feels passing on the business to more people that he or she trusts or the pressure that an owner feels from having more owners that want to take over the business. Molly et al. (2010) found that there were distinct benefits of continuing a family business versus family members opening a new firm. More formal business structures (i.e. limited liability company, corporation, or trust) and higher business functionality increased the probability of family businesses progressing into later stages of ownership transfer, but had no significant bearings on management transfer. Only 38% of family businesses were structured in an LLC, corporation or trust whereas the other 62% were either sole proprietorships or partnerships. Successful businesses may have an advantage in ownership transfer; costs associated with ownership transfer hindered the overall succession process (Bjuggren and Sund, 2001). Past studies found that estate transfer and tax implications (a large part of ownership transfer) can be very costly in both time and money (Astrachan and Tutterow, 1996).

Farms are often very asset heavy, making transfers difficult and possibly expensive (Smucker, 2017). Farms with successors made different investment decisions about 10 years before transfer of the business occurred (Calus et al., 2008). Farms were found to be in earlier stages of the management transfer process and the ownership transfer process than non-farm businesses, more than likely due to the high capital costs that come with farming. Farms accounted for 68% of the family businesses in this study. Farmers have many things to consider when contemplating retirement, from tax implications and a sustainable income

stream (Smucker, 2017) to what to do with all of their extra time and how others will manage their farm. Contzen et al. (2017) explain that retirement from farming does not take place at a certain point in time; most farmers slowly phase themselves out of the farm business and/or take on different roles in that business. Also notable, farmers may not only be giving up their career but also their homestead when they retire (Kirkpatrick, 2012). Many farm family businesses have acreage that is vital to keep an income stream for the owners into retirement (Goeller, 2012).

The presence of copreneurial owners hindered progression through the ownership transfer process, but did not affect the management transfer process. Sixty-eight percent of owners in our study were copreneurs, but 90% of them were married. We theorize that when an owner is in business with his or her spouse, the business is more closely tied to that family's wellbeing and identity. Thus, exiting the business and transferring ownership of that business to someone else could be very difficult. An entire family unit's retirement and financial position could be engrossed in the ownership of a family business. We posit that copreneurial couples likely exit the business together, thus delaying the management transfer and halting ownership transfer until retirement happens.

Overwhelmingly, it is in the best interest of business owners to transfer their business to heirs before their death, as taxes can quickly accumulate and cut into the amount of assets being transferred (Giarmarco, 2012; Hines Jr. et al., 2016). Inter vivos gifting of the family business is just one way to enable ownership transfer, but it could help to avoid taxes and penalties paid associated with inheritance consummating at the time of the owner's death (Hines Jr. et al., 2016), but such giving requires strict planning and confidence in the next generation. The obstacle of tax burden could be minimized for successors by use of life insurance on incumbents of family businesses (Vozikis et al, 2012). By using life insurance, when the owner passed away, funds would be available to pay the tax penalties owed by the successor.

Table 2. Descriptive Statistics of Variables

Variable Name	Mean (N=523)	Std. Dev.
Dependent Variables		
stage of management transfer	1.76	0.03
management transfer stage= 1	0.46*	
management transfer stage= 2	0.34*	
management transfer stage= 3	0.20*	
stage of ownership transfer	1.62	0.03
ownership transfer stage = 1	0.55*	
ownership transfer stage $= 2$	0.26*	
ownership transfer stage = 3	0.19*	
Business Characteristics		
successor identified*	0.29	0.02
discuss business goals frequently*	0.62	0.02
income over \$50k*	0.57	0.02
business age	23.93	1.04
founding generation*	0.72	0.02
farm*	0.68	0.02
LLC_corp_trust*	0.38	0.02
lack of common goals hindering transfer*	0.17	0.02
business is successful*	0.91	0.01
enough capital present to transfer the business*	0.67	0.02
Family Characteristics		•
family members in daily management	2.29	0.07
family owners	2.17	0.06
owner will give business to family*	0.61	0.02
owner will sell business to an outsider*	0.16	0.02
business functionality scale	14.40	0.09
Owner Characteristics	·	•
owner invests in business before personal finances*	0.45	0.02
owner wants heirs in business*	0.58	0.02
owner will transfer business even if it risks personal wealth*	0.40	0.02
owner knows how to start transfer process*	0.26	0.02
female owner*	0.40	0.02
years of owner's education	15.13	0.11
owner's age	54.59	0.53
owner is married*	0.90	0.01
copreneur*	0.68	0.02

^{*}The mean is the percentage of respondents with that attribute.

Table 3. Results from the standard ordered probit and bivariate ordered probit $\dot{\cdot}$

regressions

regressions			<u> </u>		I			
	Ordered Probit Regression- Management		Ordered Probit Regression- Ownership		Seemingly Unrelated Bivariate Ordered Probit Regression			
					Management		Ownership	
	Coeff.	Rob Std. Err.	Coeff.	Rob Std. Err.	Coeff.	Rob Std. Err.	Coeff.	RobStd . Err.
Business Characteristics								
successor identified	0.56***	0.11	0.57***	0.12	0.55***	0.12	0.57***	0.12
discuss business goals frequently	0.32***	0.11	0.29**	0.12	0.31***	0.11	0.28**	0.11
income over \$50k	0.01	0.12	-0.12	0.12	0.00	0.12	-0.13	0.12
business age	0.00	0.00	0.00**	0.00	0.00	0.00	0.00**	0.00
founding generation	-0.07	0.13	-0.13	0.14	-0.09	0.13	-0.13	0.14
farm	-0.23*	0.12	-0.20	0.13	-0.23*	0.12	-0.21*	0.13
LLC/corporation/trust	0.13	0.11	0.21*	0.12	0.15	0.11	0.20*	0.12
lack of common goals hindering	0.15	0.11	0.21	0.12	0.15	0.11	0.20	0.12
transfer	-0.24*	0.15	-0.13	0.15	-0.24*	0.14	-0.18	0.16
business is successful	0.29	0.22	0.20	0.21	0.30	0.22	0.21	0.21
enough capital present to transfer				4.7				
the business	0.05	0.12	0.17	0.12	0.05	0.12	0.17	0.12
Family Characteristics			· ·					
family members in daily management	0.03	0.04	0.03	0.04	0.03	0.04	0.03	0.04
family owners	0.03	0.04	0.03	0.05	0.03	0.04	0.03	0.04
owner will give business to family	0.02	0.16	0.12	0.03	0.03	0.16	0.12	0.03
owner will sell business to an	0.20	0.10	0.40	0.17	0.16	0.10	0.37	0.17
outsider	-0.20	0.21	0.03	0.21	-0.24	0.21	-0.01	0.21
business functionality scale	-0.01	0.03	0.07**	0.03	-0.01	0.03	0.06**	0.03
Owner Characteristics								
owner invests in business before								
personal finances	-0.22*	0.11	0.00	0.12	-0.21*	0.11	-0.02	0.11
owner wants heirs in business	0.26**	0.12	0.06	0.13	0.27**	0.12	0.08	0.13
owner will transfer business even if	0.02	0.10	0.14	0.10	0.02	0.10	0.12	0.10
it risks personal wealth owner knows how to start transfer	0.03	0.12	0.14	0.12	0.02	0.12	0.13	0.12
process	0.71***	0.13	0.59***	0.13	0.71***	0.13	0.60***	0.13
female owner	-0.07	0.11	0.17	0.11	-0.07	0.11	0.16	0.11
years of owner education	-0.03	0.02	0.01	0.02	-0.03	0.02	0.02	0.02
owner's age	0.01	0.00	0.02***	0.02	0.03	0.00	0.02***	0.02
owner is married	0.01	0.18	0.02	0.01	0.01	0.00	0.02	0.00
copreneur								
<u>.</u>	-0.21*	0.12	-0.45***	0.13	-0.19	0.12	-0.39***	0.13
constant					0.88***	0.08		
rho					0.70***			
N Obs	523		523		523			
Pseudo-R2	0.14		0.18		014.40			
Log pseudolikelihood	-470.39		-423.43		-814.48			

Conclusions and Implications

This study integrates the full succession process as a combination of ownership and management transfer. It contributes to the literature by modeling management transfer and ownership transfer separately but concurrently using a bivariate ordered probit regression. Empirical results show that these two stages of succession are interrelated; and, thus, should be modeled together.

Our results indicate that family, business, and ownership factors all contribute to management and ownership transfer in family businesses. Farms progress slower through both management transfer and ownership transfer than non-farm businesses. Management transfer and ownership transfer for farm families is slowed due to the asset-heavy nature of farming and the penchant for farmers to retire much later than average.

Our results reinforce Zellweger's succession framework, which states that the first step in succession planning is clarifying goals and priorities (2017, p.219). First, a strong foundation must be established in family businesses by discussing goals, identifying a successor, and educating the owner on how to start the transfer process. Many family businesses first pursue the legal aspects of their business, when communication should be the primary focus. In fact, the 2012 Intergenerational Farm and Non-Farm Family Business Survey shows that only 44% of family businesses that had completed a succession transfer, felt that the transfer had been successful. In order for practitioners to properly advise family businesses, they need to first build a strong foundation of family governance and encourage their clients to focus on clarifying goals and priorities.

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Emotional Labor and Positive Discrete Emotions: The Key to Entrepreneurial Performance

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Abstract

Using data from entrepreneurial leaders and their subordinates, this study investigates the link between the emotional labor strategy used by the leader with firm performance and subordinate outcomes. Further, the effect of leader displays of discrete emotions, both positive and negative, are investigated. Findings indicate that leader's positive and genuine emotions are positive related to subordinate outcomes. Further, discrete emotions were found to moderate this relationship. These findings should assist entrepreneurial leaders in determining the appropriate emotion to display when interacting with subordinates.



Exploring Small Business Strategy in U.S., France and India: Does Social Media CRM and Supply Chain Attributes Improve Performance?

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Abstract

This study examines small business strategy and the relationship of social media CRM practices and supply chain attributes on performance and sustainability outcomes. The paper is an exploratory study on how these managerial practices might result in differences in financial and non-financial performance compared to competitors. In addition, the study explores these practices for U.S., France and India. The findings suggest differences in managerial practices for business strategy exists across countries and performance outcomes. We offer some conclusions and direction research.

Keywords: small business, CRM, supply chain

There has been much research investigating a firm's strategy and performance particular in the small business with an international setting (Parnell, 2013). Today's businesses are developing strategies to better understand the changing technology as it relates to social media CRM usage (Trainor, Andzulis, Rapp, & Agnihotri, 2014) and reducing supply chain (Lambert & Enz, 2017) uncertainties. Although much of the findings in much of this area is based on much larger, well-endowed firms, little research has explored these areas in relation to small business particularly those across different global markets.

The purpose of this paper is to examine business strategy in relation to managerial perceptions of social media practices and supply chain practices within the context of opportunities on firm performance. There are a number of reasons for examining this area including providing new market opportunities and to satisfy new customer demands in the markets with these practices. The paper first provides a discussion of the theoretical underpinnings and a development of the constructs and then we specify relationships between and among the variables in stated research agenda. The second section discusses the methodology and data employed to test the hypotheses. Finally, the results are presented. We conclude the paper with general discussion, interpretations, and conclusions as well as some directions for future research. The intention of this research is to contribute to the understanding of the small business strategy and use of social media and business practices on performance.

Business Strategy

Developing a business strategy is associated with achieving survival and financial success is a central tenet in the strategy and small business research domain. There are two well recognized themes that are used to examine business strategies as it relates to small businesses, often referred to as generic strategies as originally suggested by Porter and business typologies as suggested by Miles and Snow. Both approaches provide a means for examining competitive strategy and numerous studies have found support for such approaches in the small business literature (Aragon-Sanchez & Sanchez-Marin, 2005; Hauser, Hogenacker, & Wagner, 2013; Parnell, 2013).

Porter's (1980) generic business-level strategy typology--cost leadership, differentiation, and focus—have long received significant empirical debate and support for its construct validity (e.g., Camison & Villar-Lopez, 2010; Robinson & Pearce, 1988). A number of researchers (Dollinger & Golden, 1992) supported the contention that Porter's (1980) framework may apply to small business as well. Extending Porter's underlying framework to strategies Namiki (1988) proposed four competitive 'patterns' that exporting small businesses may use to achieve internationalization goals.

Researchers have explored small business strategy as it relates to competitive stance and internationalization (Camison & Villar-Lopez, 2010; Hauser, Hogenacker, & Wagner, 2013), while others examined small business with Miles and Snow (1978) typology (Aragon-Sanchez & Sanchez-Marin, 2005; Parnell, 2013). Aragon-Sanchez and Sanchez-Marin's (2005) work explored the Miles and Snow (1978) typology and discovered changes in managerial behavior associated with the typology used. Parnell (2013) also found a linkage for the Miles and Snow (1978) typology and small businesses. The findings suggested small business use different links between defender, prospector, and analyzer strategies; environmental conditions; and performance vary in international settings. Likewise, Mohan-Neill (1995) suggested that firm age might also influence the level of environmental scanning which could have an effect on small business strategy.

Social Media CRM

Social media and CRM is identified as drivers of competitive advantage and performance of the organization (Trainor et. al., 2014). The concept of Social CRM is defined as using new technologies in a collaborative way to enhance customer relationships (Greenberg, 2010). Social CRM is the integration of customer-facing activities including processes, systems and technologies with social media applications (Trainor, 2014). These technological tools including the internet of things (Scibetta et al., 2018) contribute to improve performance at two levels.

The first level, the organization can capture huge amount of data about customer (requirement, complaints, experiences), facilitating the competitiveness (Trainor, 2012). Second level, this data capture enables to enhance the comprehension of the market and the interactions with the customers and prospects (Ustüner & Godes, 2006). For researchers (Hooley, et. al., 2005, Rapp, et. al., 2010), the more the relationship with the customers is performed, the more it influences the satisfaction, and then the loyalty. Customer's relationships development improves the brand attachments and brand equity (Keller, 1993). All these outputs are possible only if Social CRM is rooted in the organization practices. In order to drive performance, organization must coordinate these tools to optimize their amount of information collection (Mithas et. al., 2010): Social CRM technology have a positive effect when it is coupled with a customer-oriented organizational culture (Trainor et. al., 2014).

Lack of customer-oriented culture, does not enable the organization to harvest the huge data from social media technologies and in last, waste the customer's confidence. Therefore, as Deshpandé and colleagues (1993) showed that implementing management system and configuring an organization around customer-centric system enable social CRM capabilities and success. In fact social media technology alone may not be sufficient to gain performance and competitive advantage (Trainor, 2014). These technological tools have to be integrated and combined with other firm resources and processes (Chang et. al., 2010) to improve performance. This capability to integrate the data from social media into the organization has been measured in literature (Coltman, 2007). Our paper focuses on this point called social CRM

capability refers to an organization's competency in generating, integrating and responding to data obtained from markets especially from customers (Trainor et. al., 2014).

Supply Chain Attributes

Supply chain management involves effectively managing supply chain assets as well as product, information, and fund flows in order to fulfill a customer request (Chopra, 2019). Effective supply chain management can be very challenging because it is all about managing relationships through both the customer relationship management (CRM) process and the supplier relationship management process (Lambert, 2014). Produced by the Supply Chain Council, the Supply Chain Operations Reference (SCOR) model is a commonly used framework for assessing supply chain processes (SCOR, 2018). In the SCOR model, the Supply Chain Council identifies five important performance attributes for supply chain management. These supply chain performance attributes are; reliability, responsiveness, agility, costs, and asset management efficiency.

Reliability comprises the supply chain's performance in delivering the correct product, to the correct location, at the correct time, in the correct condition and packaging, in the correct quantity, with the correct documentation, to the correct customer. Responsiveness is the velocity at which a supply chain provides products to the customer. Agility means the swiftness of a supply chain in responding to marketplace changes to gain or maintain competitive advantage. Costs are the expenses associated with operating the supply chain. Asset management efficiency is the effectiveness of an organization in managing assets to support demand satisfaction (Dissanayake & Cross, 2018; SCOR, 2018).

Many researchers (Huan, Sheoran, & Wang, 2004; Hwang, Wen, & Chen, 2010; Zangoueinezhad, Azary, & Kazaziz, 2011; Ntabe et al., 2015) consider the SCOR model to be the standard used in academia and industry within the supply chain management area. Other research (McCormack, Ladeira, & Valadares de Oliveira, 2008; Ntabe et al., 2015) conclude SCOR has become the common framework for benchmarking and comparing supply chains and supply chain management practices. Notwithstanding the arguments of these researchers, we propose to examine supply chain performance utilizing the SCOR model's five performance attributes in this study.

Sezen (2008) empirically investigated supply chain performance by collecting data from manufacturing firms to find the relationships between the study variables. Supply chain performance attributes were in terms of three latent constructs for flexibility, resource performance, and output performance of the supply chain. Previously the SCOR framework assumed that all supply chain processes can be categorized into one of five SCOR decision areas as discussed above ("SCOR: Supply-Chain Reference Model", 2018). In 2012, a sixth decision area, enable, was added to the SCOR framework (Lambert & Enz. 2017). The linkage between these SCOR decision areas and supply chain performance is examined, for example Lockamy and McCormack (2004). Li, Su, and Chen (2011) sought to verify the relationships between the SCOR decision areas and supply chain performance based on a number of certifications. Their results showed that the SCOR decision areas are important to both supply chain quality performance as well as business performance. Lambert and Enz (2017) indicate a perceived strength of the SCOR model is performance benchmarking and process benchmarking. However, they point out a concern of benchmarking best practices is a lack of creativity and the possibility of missing an opportunity which might differentiate the firm from others.

Performance

The relationship between business strategy and outcomes, namely performance, is documented by prior research (Robinson & Pearce, 1988; Parnell, 2013). Small business and managers of them may find it useful, necessary, or even unavoidable to pursue strategies that sacrifice short-term profitability for growth. Such risky strategies may be due to environmental conditions (Covin & Slevin, 1989) or to a particular time or stage in the firm's development (Oviatt & McDougall, 1994). For example, during the start-up phase a new family firm is likely preoccupied with sales growth to establish cash-inflow to balance operating cash-outflows. Absent the ability to reach some predetermined required level in sales revenue at some point in the early development of a firm, the issue of profitability may not even materialize. This may also be true when major organizational transformation stages occur as established firms may necessarily require the (relatively short-term) abandonment of profit in favor of sales growth (Naldi, Nordqvist, & Wiklund, 2007).

The above argument may be less apparent under certain circumstances were growth performance and profit performance are convergent. However, in other conditions the two performance measures may actually diverge from one another when one considers sustainability efforts of small businesses. Sustainability activities might put an initial burden on the financial aspects of a business and its strategy. This relationship between financial performance and sustainability presents challenges when considering the international context of small businesses given their unique legal and external issues facing them.

General Research Model and Questions

The research attempts to examine two key questions in regards to the relationship of business strategy social media CRM and supply chain attributes and performance within the context of global small businesses. The first question or assumption would be that the relationship between performance and social media CRM and supply chain attributes businesses would be impacted by the experience (age of firm) and strategy. The second question was designed to test the assumption that the multidimensional aspect of social media CRM and supply chain attributes would differ for discrete levels and types of performance. That is, as small businesses seeking financial performance versus sustainability efforts might be viewed very differently depending on where the small business is located internationally.

Methodology

This study examines the managerial process used across the three countries by employing a questionnaire in each region as they relate to performance and sustainability activities. To provide consistency in the translations initial structured telephone interviews were conducted to provide consistency in French. The results suggested only a few language modifications were necessary. The final questionnaires were than administered to small and medium-sized companies in all three countries. After a reminder two weeks later, 169 U.S., 99 French and 79 India companies provided complete responses to the questionnaire, we estimated the overall response rate to approximately 16%. Because this study is exploratory in nature, we believe the benefits of studying small business managerial activities in cross-cultural organizations on sustainability and performance will provide important insights given the scope of the sample. Respondent characteristics attained from the survey suggest that on average firms were in business for 26 years, employed on average 63 employees, while 50% indicated being a family businesses, and had reported an average 18 years in business. Individual respondents included 55% of respondents reported as male and overall respondents indicated tenure of 12 years within their current organization.

Measurement

Strategy: The instrument used to measure the firm's strategy consisted of five-items that tapped into how firms compete given their unique resources and capabilities. The scale for each of the items was based on a seven-point Likert scale ranging from one = "strongly disagree" to seven = "strongly agree." These items are consistent with previous researcher examining the business strategies and competitive approaches of firms (Camison & Villar-Lopez, 2010; Dess & Davis; 1984; Namiki, 1988; Porter, 1980). However, although little prior knowledge or expectations were certain pertaining to the different approaches, little research has examined competitive approaches across these different countries for small businesses.

Respondents were asked five questions relating toothier business practices as they related to developing a business strategy. The questions were: Our organization continuously innovates it core competencies; Our organization continuously innovates its products, processes and services; Our organizational process are continuingly improved; Our organization has adopted a strategy that sets it clearly a part from other organizations; and the organization grows through partnerships with suppliers and customers. Confirmatory factor analysis provided for a single solution and reliability testing supports the construct α =.80. This construct was labeled *Strategy*.

Social Media CRM: Social CRM was measured using a modified version of an earlier version proposed by Covin and Slevin (1991). The construct consist of three distinct dimensions as reflected as information generation, information dissemination and responsiveness. Respondents were asked sixteen (16) questions employing a seven-point Likert scale from a one representing 'strongly disagree' to a seven representing 'strongly agree'. A confirmatory factor analysis was utilized to establish the presence of the multidimensionality of the construct. As expected and similar to past research (e.g. Covin & Slevin 1991) the three dimensions of Social Media CRM emerged from the analysis.

Information generation was measured by asking the following three questions of the respondents; we use social media to conduct market research, we use social media to detect changes in our customer's product preferences, and we use social media to detect fundamental shifts in our industry (competition). Reliability testing supported this dimension α =.85, and was labeled Info Generation. The second dimension was measured using the following four questions to capture information dissemination; we have frequent department meetings to discuss market trends identified on social media, our team discusses future customer needs identified in social media, our team discovers important information about competition on social media and share with other departments, and data collected on social media concerning customers satisfaction are disseminated at all levels on a regular basis. The reliability was supportive of this as well $\alpha = .79$ and was labeled *Info Disseminate*. Finally, the responsiveness dimension was captured by asking the respondents the following six questions; we use social media to respond to our customer's price changes, we pay attention to changes in our customer's products or service needs using social media, if a competitor launched a campaigns targeting our customers, we would respond immediately using social media, the social media of different departments are well coordinated, customer complaints can be monitored and addressed using social media, and when customer request us to modify a product or service, we announce any changes using social media. Reliability supported this dimension α = .87, and was labeled Responsiveness.

Supply Chain Attributes: The use of supply chain attributes reflects the use of a business's assets and financial resources to satisfy customer needs. The study used six questionnaires to capture the five supply chain attributes by using a five-point Likert scales similar to the

approach of Sezen (2008). The questions asked the respondents to compare their supply chain attributes to a similar competitor in the same industry. In this study, we decided to capture all five dimensions of the SCOR model as suggested by current research in the area.

We employ a similar methodology in this study as prior research by asking five questions that reflect each of the SCOR models dimensions. The five-point Likert scale with one representing 'well below industry average' to five indicating 'well above industry average'. The questions were: you provide the right quantity when your customers need it; you quickly respond to customer needs; you are able to respond to unplanned customer needs; you costs effectively to fulfill your customer needs; and you make profit by servicing customer needs. A confirmatory factor analysis provided a single one-factor outcome and reliability testing supported this $\alpha = .82$. We than labeled this construct *SC Attributes*.

Performance: It is often been suggested that small, private firms are often reluctant to provide specific objective information regarding performance. As for the sensitive issue of submitting performance data for small firms, we therefore used the approaches of prior research in this area (e.g. Chandler & Hanks, 1994 Zahra & George, 2000).

Respondents were asked to answer three questions concerning their performance level when compared to similar firms in their industry. To measure the relative performance levels the items used a five-point Likert scale format ranging from a one 'Well below industry average' to a five representing the 'Well above industry average'. The questions asked respondents to compare their firm to the industry over the past three years as follows: sales growth, profitability, and return on investment. Factor analysis was used on the three questions resulted in a single factor, reliability testing also found strong support with $\alpha = .78$, we labeled this construct *Profitability*.

Sustainability: Exploring the sustainability practices of organizations is becoming an important aspect of many businesses today, while one could debate if sustainability is a firm outcome; it certainly represents a major goal for most businesses today. We wanted to explore the impact of business activities on the sustainability outcomes of across these countries. Therefore, we created items to as a proxy to tap into the concept of sustainability as little research has examined this as a potential outcome.

Respondents were asked to answer three questions concerning their sustainability and environmental activities comparing themselves to similar firms in their industry. To measure the relative sustainability levels we generated three questions and used a five-point Likert scale format ranging from a one 'Well below industry average' to a five representing the 'Well above industry average'. The questions asked respondents to compare their firm to the industry over the past three years as follows: ecology use of resources, environmental stewardship, and control environmental impact. An exploratory confirmatory factor analysis was complete on the three questions resulted in a single factor, reliability testing also found support with $\alpha = .74$, we labeled this *Sustainability*.

Environment: To understand the business environment, respondents were solicited about their perception of the current business environment relative to their business operations. This was accomplished by soliciting their response to a single question 'how would you describe the business climate in your industry?' A five-point Likert scale was used to measure this construct with a scale from one 'poor' to five 'excellent'. We labeled this construct Environment.

Firm Age: Firm age was measured by asking the respondent the year the company was formed and deducted from the current year. This resulted in a continuous measure that was used in this study as a control mechanism. The findings indicate that both U.S. and India small businesses averaging 18 years while French small businesses averaged 40 years. This construct was labeled Firm Age.

Results

The purpose of our study was to examine the differences in environment, strategy, CRM Social Media, and supply chain attributes among small firms, whether county of origin plays a role in those differences, and the relationship between these constructs and performance. Table 1 reports the means, standard deviations of the study's constructs. To address the issues, the analysis of variance (ANOVA) statistical procedure was employed in order to determine if any differences among the three country groups (US, France and India) were statistically significant. The results provide some interesting findings for small firms concerning the different environment, strategy, CRM Social Media, supply chain attributes, and performance. Multiple regressions was then used to examine the managerial practices of these small businesses on performance across these three countries. The results are discussed in more detail next.

Table 1
Mean, Standard Deviations and Correlations of Constructs

	Mean, Standard Deviations and Correlations of Constructs									
		Mean	SD	1	2	3	4	5	6	7
1	Environment	3.79	0.95							
2	Strategy	5.38	1.04	0.33**						
3	Info Generation	4.33	1.70	0.16**	0.33**					
4	Info Disseminate	4.30	1.53	0.22**	0.44**	0.77**				
5	Info Response	4.28	1.54	0.11**	0.33**	0.82**	0.78**			
6	SC Attributes	3.98	0.68	0.24**	0.33**	0.12	0.09	0.02		
7	Sustainability	3.47	0.73	0.03	0.27**	0.25**	0.29**	0.26**	0.09	
8	Profitability	3.65	0.75	0.35**	0.39**	0.09	0.18**	0.12*	0.38**	0.15**

^{*} P < .05; ** p < .01

Data Analysis

The ANOVA results are reported in Table 2 for all the constructs of environment, strategy, CRM Social Media, supply chain attributes, and performance for each of the three countries. The overall sample size for the study included 169 U.S., 99 for French and 79 Indian small businesses. The first ANOVA examined whether these small businesses viewed the business climate differently as shown by the mean scores for environment. Overall, U.S. (4.01) and Indian (3.95) small business findings were significantly higher positive perceptions of the business climate than their French (3.30) counterparts did. The second ANOVA tested to determine if small business responded differently when it comes to their business strategy. The results suggest that the U.S. (5.49) and Indian (5.55) scored significantly higher than France (5.04) did on this measure, suggesting U.S. and Indian firms seem to employ more of a differentiation strategy then French small businesses.

The next set of ANOVAs examined the three dimensions of social media CRM, info generation, info disseminate, and info response. As reported by the results across all three dimensions the Indian small businesses reported significantly higher mean estimates than both the U.S. and French businesses. For info generation, Indian small businesses reported a significantly higher

mean (4.80) than the other two groups, while the U.S. was significantly higher (4.28) than France (4.01). Additionally, Indian small businesses were also significantly higher when it comes to info disseminate (4.76) compared to U.S. (4.31) and French (3.91), while U.S. small businesses were found to be significantly higher than the French small businesses. The results for info response also found that Indian small business reported significantly higher results (4.78) than either U.S. or France, interestingly France reported (4.18) compared to U.S. (4.10) although these two groups were not significantly different.

Table 2 ANOVA Results for Small Businesses Strategy, Social Media CRM, SC Drivers and Performance

and reformance							
	U.S.	France	India				
	(n=169)	(n=99)	(n-79)				
Enginement	4.01***	3.27***	3.96***				
Environment	(0.88)	(0.90)	(0.77)				
G	5.50**	5.04***	5.55***				
Strategy	(1.06)	(1.11)	(0.83)				
	4.29*	4.01***	4.81***				
Info Generation	(1.85)	(1.59)	(1.44)				
Info Disseminate	4.33***	3.86***	4.77***				
into Disseminate	(1.64)	(1.45)	(1.31)				
Info Response	4.12***	4.21***	4.77***				
into Response	(1.68)	(1.37)	(1.55)				
SC Attributes	4.29***	3.63***	3.81***				
SC Attributes	(0.52)	(0.61)	(0.69)				
Sustainability	3.354***	3.38***	3.81***				
Sustamasmy	(0.75)	(0.63)	(0.72)				
Profitability	3.77***	3.30***	3.77***				
1 Torresonity	(0.80)	(0.65)	(0.66)				

^{*} p < .10; ** p < .05; *** p < .01

The next ANOVA examined SC attributes across the three groups. The results reported in Table 2 and illustrated in Figure 1, indicate that U.S. small businesses had the highest overall mean score (4.29) and was significantly different from both the Indian and French small business groups. The Indian small businesses reported the second highest mean scores (3.81), while the French small businesses reported the lowest score (3.63). Although the results found no significant differences between the Indian and French small businesses when it analyzing the means of SC attributes.

The final set of ANOVAs examined sustainability practices and financial performance. The results reported in Table 2 indicate that the Indian small business had the highest mean score for sustainability (3.80) which was significantly higher than the either the French (3.41) or U.S. (3.35) small businesses. The financial performance measure was significantly higher for U.S. (3.78) and Indian (3.78) small businesses compared to French (3.31) small businesses. While clearly, the results suggest no difference between the U.S. and Indian small businesses. The results for sustainability and financial performance are based on a five-point Likert scale.

Next, we wanted to explore the effects of these small business managerial practices as demonstrated by strategy, CRM Social Media and supply chain attributes on both sustainability and financial performance across the three countries. We conducted two sets of regressions to

determine if managerial practices influenced these outcomes, the first set of regressions explored sustainability and managerial practices. In the first set of regressions, we examined the entire population of small businesses (see Table 3). We completed a stepwise regression that included the constructs firmage and environment along with strategy in step one. This approach is used throughout the analyses to explore the impact of strategy on the dependent constructs, in this case sustainability, while controlling for firmage and perceived business climate conditions. The outcome of the first step resulted in strategy having a significant positive coefficient explaining the dependent variable (r^2 =.08; F-value=9.876***). We than added the three dimensions of social media CRM (info generation, info disseminate, and info response) and SC attributes in the second step for all small businesses. The results were found to be significant and the model seem to improve with the strategy and info disseminate coefficients being positive significant and explaining sustainability (r^2 =.13; F-value=6.790****).

Table 3
Regression Results for Sustainability

Variables	All Small Businesses		U.S. Small Businesses		French Small Businesses		Indian Small Businesses	
Constant	2.429	2.200	2.375	1.457	2.567	1.975	2.105	2.047
FirmAge	0.01	0.01	0.01	0.01	0.01	0.01	-0.01	0.01
Environment	-0.04	-0.05	-0.03	-0.03	-0.05	-0.07	-0.05	-0.02
Strategy	0.22***	0.15**	0.19***	0.03	0.19***	0.15**	0.33***	0.35***
InfoGeneration		0.01		0.12**		-0.09		-0.03
InfoDisseminate		0.08*		0.08		0.16**		-0.08
InfoResponse		0.04		-0.04		-0.01		0.11
SC Attributes		0.03		0.25**		0.18		-0.03
R^2	.08	.13	.07	.18	.09	.18	.14	.15
Adjusted R ²	.07	.11	.05	.14	.05	.11	.11	.08
Change in R ²		.05**		.11***		.09*		.01
F-value	9.876***	6.790***	3.794**	5.094***	2.726**	2.384**	4.483***	1.996***

^{*} p < .10; ** p < .05; *** p < .01

The second set of regressions for sustainability explored only the U.S. small businesses and followed the same approach as with all small businesses. The first regression for U.S. again found that the strategy coefficient significantly explained sustainability while neither firmage nor environment seemed to effect the model (r^2 =.07; F-value=3.794**). However, the results from the second step after the other study variables were added, found that only info generation and SC attributes being positive and significant. The results also improved the overall model for sustainability (r^2 =.18; F-value=5.094***). The next set of regressions examined sustainability for the French small businesses. The results of the first model again found that the strategy coefficient was significantly positive in explaining sustainability (r^2 =.09; F-value=52.726**). The results of the second step for the French small business results suggest that strategy and info disseminate have significant and positive coefficients. The model also revealed improvement in explaining the sustainability construct for French small businesses (r^2 =.18; F-value=2.384**). The final set of regressions examined the Indian small businesses

and sustainability. The first regression results suggest that strategy is positive and significantly explained the dependent construct, sustainability (r^2 =.14; F-value=4.483***). The addition of the other variables, info generation, info disseminate, info response and SC attributes were not found to be significant in explaining sustainability however strategy was somewhat strengthened. The overall model improved only slightly from the first step. (r^2 =.15; F-value=1.996***).

The final set of regression examined small business profitability across the three countries based on managerial practices. Again, the first set of regressions examined the entire population of small businesses by first entering the control measures of firmage and environment along with strategy. The findings suggest that both environment and strategy have significant positive coefficients in explaining profitability for all small businesses, see Table 4 (r^2 =.16; F-value=17.320***). The second step included adding the social media CRM constructs; info generation, info disseminate, and info response as well as SC attributes into the model. The results found that environment, strategy and SC attributes were positively significant in explain profitability, while info generation had a negative significant impact. Although, the overall model improved significantly (r^2 =.26; F-value=13.293***).

Table 4
Regression Results for Profitability

Variables	All Sm	all Businesses	U.S. Small Businesses		French Sma	all Businesses	Indian Small	
							Businesses	
Constant	2.021	1.203	1.965	1.070	1.988	1.682	2.007	0.941
FirmAge	-0.01	-0.01	0.00	-0.01	-0.01	-0.01	0.01	0.01
Environment	0.14*	0.10*	0.14**	0.11*	0.28***	0.26**	-0.06	-0.01
Strategy	0.23***	0.16**	0.23***	0.15**	0.09	0.06	0.35***	
								0.30***
InfoGeneration		-0.10*		-0.12*		0.02		-0.08
InfoDisseminate		-0.01		0.05		0.03		-0.12
InfoResponse		0.09*		0.05		-0.01		
								0.19**
SC Attributes		0.33***		0.37***		0.09		0.29**
R^2	.16	.26	.15	.25	.23	.24	.19	.32
Adjusted R ²	.15	.24	.13	.21	.20	.17	.16	.26
Change in R ²		.09***		.10***		.01		.13***

The results for the U.S. small businesses and profitability were completed next. The frost model found that both environment and strategy were significantly and positive in explaining the model (r^2 =.15; F-value=9.503***). The second model included significant positive coefficients for environment, strategy and SC attributes, while info generation again had a significant negative coefficient. However, the overall model improved significantly (r^2 =.25; F-

 $value=7.404^{***}$). The set of regressions examined profitability for French small businesses. The first regression found only environment being significant and positively in the model $(r^2=.23; F-value=7.458^{***})$. The second step in the regression found no other construct except environment in explaining the model. Although the model was significant, the additional independent variables added little to the overall model $(r^2=.24; F-value=3.261^*)$. The final set of regressions examined profitability of Indian small businesses. The results also found strategy as a positive significant predictor into the overall model $(r^2=.19; F-value=6.210^{***})$. Step two of the regression found that strategy, info response and SC attributes had positive significant coefficients. The model was positive and the explanatory power increased significantly $(r^2=.32; F-value=5.080^{***})$.

Discussion

The above findings suggest some similarities and differences for small businesses across the three countries. Generally, the results seems to suggest that Indian small businesses scored significantly higher on all dimensions except for on the sustainability construct. Figure 1 also suggest that French small businesses consistently scored lower on all dimensions while U.S. small businesses were general in the middle. More work needs to be done in this area, as this might be a reflection of the translation into the French businesses context although we did take steps to ensure consistency of the instrument. In addition, these results are based on a cross-sectional examination, it is possibly future research will find different findings. Nonetheless, these factors do present limitations of this research.

A closer examination of the regressions also found some unique patterns emerge from the results across the three countries. As sustainability has become an important goal of many small businesses today, we believe it is important to examine how strategy, social media CRM and SC attributes contribute to these goals. For U.S. small businesses the results suggest that info generate and supply-chain activities contribute to our understanding of sustainability. For the French small businesses, the results strategy and info disseminate influence the sustainability goal. Finally, for the Indian small business only strategy seems to explain the sustainability. Clearly, the results suggest different patterns used by small businesses for sustainability endeavors depending on the country.

The final set of regressions examined how managerial practices (strategy, social media CRM and SC attributes) influences financial performance across the three countries. For U.S. small businesses the results suggest that strategy, info response and supply-chain explain a profitability. Interestingly the findings also suggest that info generation negatively influences profitability. Suggesting either small business in the U.S. do not use social media to generate information or that information gathered might affect businesses activities converse of planned practices. For the French small businesses, only the control measure of business climate (environment) seemed to contribute to profitability. Clearly, these managerial practices do not influence profitability or some other phenomenon is effecting these small businesses. More research is needed to better understand these small businesses given the context of country. Finally, for Indian small businesses, the findings suggest that strategy, info response and supply-chain influences profitability. These results are similar to the U.S. small businesses. The practical implications for the findings in this report are managerial practices are very different based on country and the small business goal. The results for sustainability and profitability goals of small businesses were different for each country. Clearly, more crosscultural work is needed for small businesses given these managerial practices (strategy, social media CRM and SC attribute) and outcome. The practical implications of our findings are that small business and organizational leaders have very different approaches to the three aspects of management practices leading to the very different outcomes.

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The Small Business Institute and Service Learning

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Abstract

While service learning and the Small Business Institute Program (SBI) developed separately, their theoretical justifications stem from research finding that learning is enhanced with real world applications. Service learning has both qualitative and quantitative research verification of its results while the SBI program primarily has anecdotal or qualitative justification. Researchers provide anecdotal evidence that SBI programs build student skills such as: critical thinking, team work, cooperation, negotiation, and community development. Using a service learning instrument, the authors tested the student engagement for classes with no client, one client per class and a client per team. The authors found that there were significant differences between the means on many student questions between the class with no client and the classes with clients. Surprisingly, there were no significant differences between the class with one client for the whole class and the classes with a client per team. The authors concluded that real world experience with a client is the key regardless of whether there is one client for the whole class or a client per team. The authors encourage other SBI programs to collaborate with the service learning entities on their campus to engage in further research.

Keywords: Small Business Institute, Consulting, Service Learning, Student Engagement

History, Benefits and Theoretical Basis

Both Service Learning and the Small Business Institute (SBI) program trace their roots to Dewey (1916;1933) who argued that leaning should be experience based. The programs developed separately with service learning established with the advent of land grant colleges and agricultural extension programs. Service learning got a boost when the Academy of Management promoted the technique and cemented the concept as a regular topic in their meetings (Dipadova-Stoacks, 2005).

The SBI began with a group of academicians who started their own conference in the 1970s to promote and encourage student field based consulting experiences. The program reached its peak with a grant from the Small Business Administration (SBA) to provide consulting to their clients. Currently the program sponsors a conference, two quality academic journals, and project of the year competitions. Many qualitative articles have researched the SBI's ability to build student skills such as: cooperation, team work, critical thinking, networking, negotiation, and community development (Cook, Belliveau, and Koop, 2013; Bradley, 2003; Brennan 1995; Lacho and Bradley, 2010).

Both programs have theoretical justification from research by Kolb (2005) who argued that students have different learning styles which real world experiences provide. Wang and Calvanon (2018) posit that service learning provides the opportunity for concrete experiences, reflective observations, abstract conceptualization, and active experimentation.

Research, Results, and Conclusion

This research attempted to add to the qualitative literature some quantitative results using the university's service learning questionnaire. The questionnaire was administered to a class with no client, one client, and classes with a client per team. There were significant differences between the means on several questions from no client to the classes with an outside client.

The second hypothesis tested whether there would be significant differences between the means on several questions for the class with one client and the classes with a client per team. The authors believed that having a client for each team of two to three students would lead to greater interaction, more student engagement, and higher means on the service learning questionnaire. This did not prove to be the case leading the authors to conclude that the use of a client, even if that client is shared with the whole class, leads to greater student engagement.

The authors conclude that the key to student engagement which leads to enhanced learning is a real world experience where a client is involved. The authors believe that SBI programs should collaborate with their service learning colleagues on student engagement, student learning outcomes, and student knowledge retention.

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The Circular Economy and SMEs

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Abstract

The circular economy (CE) abandons the traditional linear view of a product life cycle that ends with waste by seeking to extract and recapture the full value of materials and energy, with a goal of eliminating waste. This applied paper offers an overview of the major features of a CE system and examines potential practical implications for SMEs and policymakers. The CE offers SMEs opportunities such as meeting consumer demands, reductions in risk, new revenue streams, cost reductions, and development of collaborations with supply chain partners. Ways that policymakers can foster SME participation, such as fostering business networks, are identified.

Key Words: Circular Economy, Small Business, SMEs, Small-to-Medium Enterprises, Sustainability

The Circular Economy and SMEs

Sustainability implicitly mandates that the future not be compromised or undermined by what businesses do today to remain competitive in their efforts to meet stakeholder demands (Hubbard, 2009; World Commission on Environment and Development, 1987). As this orientation has evolved over the past two decades, it has led to a greater emphasis on the often unintended environmental, social, and economic impacts of the products and services that companies provide. At the same time, however, the fundamental linear model of production of goods has not changed: the input of natural resources is transformed into products that ultimately are disposed of as waste. Despite recycling, this is unsustainable for the planet over the long haul unless consumption were to be maintained at the rate of replacement – a goal that appears to be increasingly out of reach (Bullard, 2015).

A different paradigm is required. The circular economy (CE) is a system of recapturing value achieved through abandoning the traditional linear view of a product's life of take, make, and waste and transforming that into an economy in which the full value of materials and energy is utilized (Ellen MacArthur Foundation, 2015a). The goal of this circular process is to minimize or eliminate leaks of materials and energy into waste. What is traditionally considered waste must itself also be minimized, reused, or recycled. In this iterative way, product lifetimes are extended and the utility of resources and products is kept at its highest level (Bocken, Olivetti, Cullen, Potting, & Lifset, 2017). This maximizes value and minimizes environmental impacts.

The CE paradigm offers Small-to-Medium Enterprises (SMEs) the opportunity to reduce their costs, their negative environmental and social impacts, and their risk. Growing in prominence for a number of years, the CE was formally adopted in June, 2018 by the European Union (EU) in the form of a legislative package that set goals for 2030 to reduce material waste flowing to landfills and to increase the reuse and recycling of materials. These goals address both countries in the EU and specific categories for products produced and sold in the EU (e.g., electronics, automobiles) (European Union, 2018). In the current global economy, these goals will have a direct impact on many SMEs based in the United States. By strategically addressing their positioning in the CE and taking action to become a participant in the CE,

SMEs can take advantage of both the European and spreading global effort and of the CE movement as it evolves in the United States. The CE also provides business opportunities for addressing links within or among the loops in a CE (e.g., sharing, maintaining, reusing, refurbishing, and recycling). This applied paper introduces and explains key features of the concept of the circular economy system and examines potential practical implications for SMEs and SME policymakers.

The Circular Economy

Industrial economies have been characterized by a model of production and consumption in which raw materials are converted into products which are sold, consumed and discarded as waste (i.e., take-make-waste) (Ellen MacArthur Foundation, 2015a). As the world's population has expanded and the finite nature of resources has become more apparent, the limitations of this model have become more apparent (see, for example, Crainer, 2017; Minter, 2014). In contrast, the CE is an economic model that is restorative of materials and energy (Ellen MacArthur Foundation, 2015a; McKinsey, 2014; Ormazabal, Prieto-Sandoval, Puga-Leal, & Jaca, 2018). It works by recirculating materials and energy instead of them flowing in a linear fashion through the production process and consumption that ends in waste at the landfill. The CE consists of two main cycles to recapture value and minimize waste. These cycles, biological and technical, recapture value from products instead of the value going into landfills (Ellen MacArthur Foundation, 2015a). As shown in Figure 1 (reproduced from the Ellen MacArthur Foundation, 2015a), the technical cycle consists of technical materials that cannot be decomposed by organisms (Bourguignon, 2016). The biological cycle consists of circulating biological materials that can be decomposed by organisms (Bourguignon, 2016).

Our primary focus in this paper is on the technical cycle. Looking at the technical system in the CE, there are four major loops of materials, as shown in Figure 1. The inner or tighter loops in the CE have the greatest value recapture (i.e., as materials pass to outer loops, a lower percentage of value is recaptured) (Ellen MacArthur Foundation, 2015b; PWC, 2017). The loops can be closed loops or open loops. A closed loop is when an organization captures and reuses its inputs (e.g., captures scrap materials to reuse as input material, recaptures heat). An open loop is when materials are not reused by a business. Instead, the materials are transferred to another business. An example of a closed loop can be found in the practices of the company Deltec Homes which makes eco-friendly homes by producing panels and roof structure in kits. It recaptures materials used in its production process. These materials are then reused in the production of panels (e.g., wood and insolation materials) (S. Linton, President Deltec Homes, personal communication, November 8, 2017). An example of an open loop is when spent grain from a brewery is transferred to another business which uses it for compost and fertilizer. In an open loop, there is less efficiency because material movement (i.e., transportation) consumes resources and produces emissions into the environment (i.e., waste). The goal is to increase the duration that material recirculates within the loops and to use the inner loops whenever possible (Ellen MacArthur Foundation, 2015a). There is a loss in the value recaptured as material moves from inner loops into the outer loops in a CE (PWC, 2017).

Renewables Finite materials Regenerate Substitute materials Virtualise Restore Stock management Renewables flow management BIOLOGICAL CYCLES TECHNICAL CYCLES Farming/collection Parts manufacturer Biochemical feedstock Product manufacturer Recycle Regeneration Service provider 1010 Returbish/ Share remanufacture Biogas Cascades Maintair Anaerobic digestion Collection Collection Extraction of biochemical feedstock² Minimise systematic leakage and negative externalities Hanting and fishing
 Can take both post-harvest and post-consumer waste as an input

Figure 1. The Circular Economy

Ellen MacArthur Foundation (2015a)

The innermost loop in the technical cycle in a CE is sharing of materials. Collaboration in the sharing of space and equipment is certainly a new and important element for both consumers (e.g., ride sharing) and businesses (e.g., rentals; repair cafes/outlets) (Ellen MacArthur Foundation, 2015b). It increases product utilization by recapturing value and minimizing waste.

The second loop, moving outward, is to maintain and prolong materials. This involves keeping equipment and/or products in good shape to extend their life and increase efficiency, thus reducing both short term and long term costs. For example, the Internet of Things (IoT)

uses the Internet to connect and monitor objects. The IoT will allow for predicative models that will increase the effectiveness of maintaining equipment (McKinsey, 2018). The next loop in the CE is to reuse or redistribute and thus to prolong the time that resources stay in the cycle. The reuse of a business's waste by the business (e.g., Deltec Homes) is a closed loop example of this. Another example is reuse of clothing in second hand stores or vintage clothing shops. This is an open loop because the goods have to be transported in order to be resold and reused. (Hand-me-downs within a household would be a closed loop example in this context.) Extending this example, it has been estimated that increasing the volume of clothing that is "reused or remade" can not only generate additional streams of revenue but also can save \$71 billion in material costs annually in the UK alone (Crainer, 2013).

Refurbish or remanufacture is the next loop in the technical cycle. For example, Renault designs its engines to return to its factories and then it remanufactures the engines. This remanufacturing uses 80% less energy, 90% less water, and generates 70% less oil and detergent waste than new production (McKinsey, 2014; Renault GRI Report, 2017). These energy and materials savings demonstrate value recapture that is lost in new production alone (take-make-waste model). In another example, Caterpillar has been remanufacturing its engine blocks since 1973 (Ellen MacArthur Foundation, 2018). The company has designed its new engine block cylinders so that during manufacturing sleeves are inserted into the cylinders. When the engine block is returned to Caterpillar, the sleeves can be removed and the cylinders are sprayed with new metal to return the engine block to like-new condition to be reused. Previous engine cylinder design without the sleeves only allowed the engine block cylinders to be rebored and reused three times (Caterpillar, 2018; Ellen MacArthur Foundation 2018).

Recycling is the outside loop in the technical cycle of the CE. Materials are recycled as input materials for manufacturers. The clothing not suitable for reuse can jump loops from reuse or redistribute to this outer loop in the technical system in a CE. This clothing material (i.e., textiles) can be used by secondary material suppliers for uses such as insulation in either the automobile or construction industries (McKinsey, 2014). This jump decreases the value of the materials because of the transportation and the transformation process required to recycle, demonstrating how this outer recycling loop is less efficient compared to inner loops, such as sharing (PWC, 2017).

The biological cycle in the CE is similar to the technical cycle in that the innermost loops are most efficient, that is, with the greatest recapture value. Biological processes range from extraction of biochemical feedstock to composting. An example from this cycle is Sierra Nevada Brewing's Mills River facility that generates electricity from biogasses produced from its wastewater treatment plant (Sierra Nevada Brewery, 2015). Sierra Nevada Brewing's Mills River facility also distributes spent grain to a business that uses it for composting and fertilizers which are then sold at outlets for gardeners (Sierra Nevada Brewery, 2015).

Benefits and Opportunities for SMEs

The benefits to an SME of adopting the CE are many. There is a benefit to the environment through reduced greenhouse gas emissions, use of energy, water, and materials. There is reduced risk in the supply of raw materials (e.g., price volatility, availability and dependency on importing materials). Increased competitiveness through cost reduction alone is estimated as an annual benefit of €600 billion (\$516 billion) in the EU (Bourguignon, 2016). The CE potential provides SMEs with many opportunities. As consumers' preferences and behavior changes and they become more environmentally aware (e.g., towards sharing, access instead of ownership, etc.), businesses need to adapt (e.g., their supply chain, waste practices, products, etc.). If businesses do not change, then they increase the risk of competitors or new entrants to their markets filling the environmentally friendly gap (PWC, 2017).

As new technology (e.g., the IoT) becomes more widely available and economical for SMEs, there are opportunities to innovate. Predictive models of parts and equipment based on the IoT and data analytics can be expected to open up new revenue streams (e.g., parts replacement, reuse, refurbish, remanufacturing) and cost savings (e.g., extending use of equipment). Turning waste into recycling can reduce waste disposal costs, can be a potential new source of revenue, or can reduce costs if the waste is captured and reused within the business. Use of recycled inputs can reduce material costs.

Risk exposure from supply chain price volatility can be reduced through the use of recycled inputs either from purchasing recycled inputs (open loop) or waste captured within the business and recycled as inputs (closed loop). Reputation and regulatory risk can be reduced by engaging in circular thinking and positioning a business within the CE (PWC, 2017). There is resource scarcity in many industries which has led to price volatility. Having access to bio stock can offset this (e.g., source minerals as inputs).

Developing circular business models may fit well with an SME's existing competitive strategies (e.g., differentiation via recyclable packaging). If not, then developing new more environmentally friendly strategies should strengthen a company's competitive position. Competitive position can be enhanced with innovation to create value for customers achieved through product design or delivery. There are large opportunities for an entrepreneurship strategy in establishing networks and interconnections among other businesses and supply chain partners to facilitate the value recapture either within loops or among loops.

Practical Implications: Facilitators of CE Participation

For an SME to position itself and participate in the CE, there are a number of facilitators. One facilitator is company environmental culture in which management is committed to placing an emphasis on reducing environmental impacts of the business (Rizos, et al., 2016). A deep understanding of how its customers make product decisions is also important (Hazen, Mollenkopf, & Wang, 2017). Networking and collaboration with other SMEs to form supply chain partnerships (Rizos, et al., 2016; Weetman, 2017) is another important facilitator. Collaborations among for-profit and not-for profit organizations can provide synergies necessary for a CE. For example, a for-profit developer partnered with a not-for-profit economic development organization to develop an abandoned building in Chicago into a commercial space for business occupants, creating a local CE (Ellen MacArthur Foundation, 2017).

Another facilitator is management engagement in circular thinking (PWC, 2017). Moving to the CE paradigm demands a rethinking of the old ways that services and products are developed and provided (Esposito, Tse, & Soufani, 2018). Thinking circular raises issues for

SMEs to address, such as the following. Where is the business currently participating in the CE? Are there networks in place for reverse logistics? Are our products designed to be taken back and refurbished or remanufactured? Are they designed for disassembly? What happens to our products when customers are finished with them? What is the utilization rate of our assets? Can we pilot ideas for increasing participation in the CE? Are our customers expecting us to deliver our products in a new innovative way? What cost savings are possible from switching to renewables, reused, or refurbished sources in our supply chain (PWC, 2017)?

Practical Implications: Barriers to CE Participation

It is well documented that SME's face challenges because of their limited size (e.g. lack of resources). These are summarized by Shields & Shelleman (2017). The barriers to developing and participating in a CE include a lack of financial support for the investment in developing infrastructure around design, reverse logistics (i.e., returning the products to the business for reuse) (Rizos et al., 2016), lack of sufficient management information systems (Ormazabal et al., 2018), and lack of support from government and other public institutions (Ormazabal et al., 2018; Rizos et al., 2016). SMEs must find a way around these challenges to participate in the CE and benefit from its opportunities. Collaborative strategies may be one approach to accomplish this.

Implications for Policymakers

There are a number of important implications of the CE for economic development policymakers with respect to SMEs to overcome the challenges and barriers that they may face. One implication is the development of policies and infrastructure to support the CE. For example, in the EU, there have been extensive efforts to provide opportunities for small businesses to link into the CE via the Internet. Business owners provided information about their business (level of interest, what the business does, contact information) on forms on websites in order to form networks of businesses related by SE loops for potential partnerships. Government policies and incentives for consumers to choose remanufactured products can help to change their behavior (Hazen, Mollenkopf, & Wang, 2017). Provision of financial support for SME investments necessary to participate in the CE is another important potential policy initiative. The EU has addressed financing for SMEs in member countries. Education and training to spread the skills and knowledge necessary to support the CE is another opportunity for policymakers. In addition, development of incubators can focus on bringing together individuals and businesses either to start new businesses or clustering existing businesses to support loops (e.g., sharing, maintaining/repairing, reusing and redistributing, refurbishing and remanufacturing, and recycling).

Conclusions

In conclusion, the shift to the CE paradigm expands sustainability and offers SMEs opportunities. SMEs can better meet consumer demands for sustainable operations and products while also more fully participating in global markets via collaborations and supply chain partnerships. It is time that SME economic development agencies in the US begin to think circular in order to gain the benefits and exploit the opportunities that a CE presents to SMEs. Policymakers must promote the CE and begin to offer support that addresses the barriers that SMEs face in trying to adopt a CE. It is time to circle towards the CE.

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Making The Case For Virtual Competency-Based Education: Building A Twenty-First Century Small Business Workforce

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Abstract

Many universities deliver online programs focusing on the development of a highly qualified 21st century workforce to support the unique needs of small businesses in the USA by structuring curriculum around a competency-based learning approach to teaching and learning. This research seeks to demonstrate how small businesses and universities can partner to develop professional competencies, particularly with regard to the knowledge, skills, abilities and behaviors that enable progress in a 21st century small business workforce, since this remains the subject of continuous research. Using a single-case study format this research presents a theoretical competency-based curriculum model for virtual education programs designed to enable a 21st century small business workforce to succeed. This process is tested as applied by the researchers in various courses taught at universities throughout the US.

Keywords: Small Business Education, Competency Based Education, Small Business Workforce, Small Business Development

Introduction

Small businesses require a uniquely skilled workforce that possesses 21st century professional competencies that may be developed through a combination of competency-based education (CBE) and experiential learning (EL) opportunities offered by Universities (Rosen, 2011; Degravel, 2011; Bruce & Scott, 1987).

Universities have recognized the need for training and developing students on the valuable intrapreneurial and entrepreneurial knowledge, skills, abilities and behaviors necessary for a career in the small business sector of the United States of America (USA).

To cater to the small business sector, universities can design curriculum to prepare students to play an integral role in the small business workforce (Morris et al., 2013; Redmond & Walker, 2008; Scott, 2008; Scott, 2015; Audet, Tremblay, Chartier, & Contreras, 2018). Small businesses should also endeavor to partner with institutions of higher learning to evaluate, determine, and benchmark the required professional competencies that train students to become valuable and successful participants in the 21st century small business workforce (Degravel, 2016). Through the development and implementation of small business focused CBE, students attending virtual education programs can have the convenience and flexibility to attain a valuable education and to become a driving force behind the progress and continuous evolution of the small business sector in the US.

Administrators of universities and small business managers are forming alliances to collaborate and design solutions to fortify a teaching and learning paradigm focused on delivering reality-based learning experiences. Such experiences immerse students in challenging situations and allow them to practice and demonstrate 21st century professional competencies.

Educators are piloting innovative curriculum designs using EL, active learning and authentic assessment methods. Such methods immerse students in reality-based learning situations that require competencies like improvisation, professional communication abilities, abductive reasoning, analytical skills, perseverance, persistence and many other existential professional competencies (Degravel, 2011; Thagard, 2005; Chartier, & Contreras, 2018).

This exploratory study presents a theoretical competency-based curriculum model designed for educators to evaluate, test, improve and adopt as a best practice in small business-related program and course curriculum design. In an effort to connect the reality-based work environment with online learning, some universities specializing in the delivery of online degree programs have strategically designed CBE programs that utilize EL and authentic assessment techniques to design and deliver curriculum.

The scope of this study is limited to the topics of instructional design and academic strategy as depicted in an overlap between the CBE and professional competency variables found in the figure 1 conceptual framework. The academic strategy, competency-based instructional design concepts and definitions of professional competencies found in the contemporary work of Gervais (2016), Lans, Blok, and Wesselink (2014), Competency Works (2013) and O*Net Online (2014) formed the basis for studying the aforementioned variables, resulting in the formation of the competency-based learning, performance, and behavior (CBLPB) instructional design strategy presented in figure 3.

Conceptual Framework

As educators and practitioners, the authors of this paper continuously strive to develop and encourage the adoption of competency-based curriculum in universities throughout the US. The conceptual framework depicts the interconnected nature of three main variables: direct assessment, speed to degree, and professional competencies.

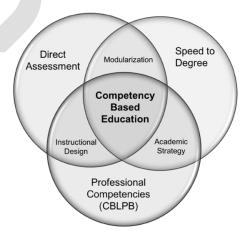


Figure 1.

Considering this conceptual framework, it may be possible to overcome the persistent divide between academics and practitioners. The conceptual framework shown in Figure 1. depicts the juncture between direct assessment, CBLPB, and speed to degree variables in relation to building a CBE system (Gervais, 2016; McKenna, 1982; Competency Works, 2013; Moana, 2015; O*Net Online, 2014).

This study presents a CBE based instructional design model that bridges the academic-practitioner divide by making professional competencies an integral component of the academic strategy of universities with virtual degree programs.

Purpose of the Study

What is the value of academia if it is not helping students actualize and put to practice the wisdom and professional competencies they have learned in a real-world situation? Small businesses and universities have an opportunity to create a mutually beneficial teaching and learning paradigm by establishing professional competency benchmarks that enable a 21st century small business workforce (Morris, Webb, Fu, & Singhal, 2013; Redmond, J., & Walker, 2008).

To innovate and to enable growth, small businesses should consider establishing working relationships with universities willing to listen and take actions that bolster and strengthen the small business sector of the USA, which can result in economic benefits, improving societal conditions, and a more qualified, dynamic and prepared workforce (Lans, Hulsink, Baert, & Mulder, 2008).

Universities, in turn, can benefit from working with small businesses willing to consult on improving and innovating curriculum to meet mutually altruistic goals, objectives, and obligations to educate and improve society within the US (Lans et al., 2014; Kezar, Chambers, & Burkhardt, 2015). This coalition of practitioners and academics can add great value to the learning experience and journey of higher education students seeking to become entrepreneurs and intrapreneurs within the small business sector (Morris et al., Lans et al.; Gervais, 2016, Moana, 2015).

This single-case study is based on the philosophical tenets of phenomenology, and explores the sentiments, lived experiences, and best practices of five educators delivering CBE at Commonwealth University in order to establish the basis for a CBE instructional design model for virtual degree programs and courses.

Additional secondary research on the conceptual framework variables guided the design and development of the competency-based instructional design strategy presented in Figure 3 of this study. This CBE instructional design strategy serves as an open source concept for all educators, small business managers and entrepreneurs to adopt and apply in the creation of course and programmatic curriculum and training programs. This primary research question guided this study and the development of the competency-based curriculum model: How does an accredited University develop competency-based undergraduate degree programs and courses to prepare 21st century small business workforce?

Literature Review

Organizations are intricate entities that have been the focus of academic and practitioner attention for over a century (Scott, 2008, Burns & Stalker, 1994; Mintzberg, 1979; Segal-Horn, 1998; Bruce & Scott, 1987).

In the 21st century, small business organizations are managing customer transactions and relationships with an emphasis on delivering quality service, a feat that has become an elemental part of small business success (Scott, 2015; Bolton, 2004; Day, 2003; Timmerman, 2010).

To develop and sustain a competitive market position, a small business must attract and invest in talent that possess the 21st century professional competencies necessary for success, stability, and growth. Building alliances with universities and other institutions of higher education can enable small businesses to gain a competitive edge by training and developing small business employees via an innovative and specialized competency-based curriculum. Innovative approaches to teaching and learning via the internet continue to advance at a rapid pace, enabling the higher education industry to strategically tap into forgotten markets like the small business sector of the US (Scott, 2015).

Competency Based Education

The concept of CBE has evolved since it was introduced in the mid-1960's to address the inadequacies of teacher education (Gervais, 2016; McKenna, 1982). Interest in CBE programs has risen in recent years due to gainful employment legislation that calls for institutions of higher education to be held accountable for preparing students for a viable career in their chosen fields of study. Today, educators, institutions, and governmental agencies view CBE as a model focused on ushering learners through an academic program based on the mastery of content rather than on a time-oriented requirement. A CBE program is an academic strategy that immerses students in reality-based curriculum that is supported by various instructional techniques, such as coaching, lectures, tutoring, and advising (Fain, 2014; Competency Works, 2013; Campion et al., 2011; Shippmann et al., 2000; Moana, 2015).

From a theoretical perspective CBE addresses three distinct areas of traditional education that have been under scrutiny for some time, including speed-to-degree, direct assessment, and professional competencies. Speed-to-degree refers to "students' progress to more advanced work (based) upon a demonstration of learning by applying specific skills and content" (Competency Works, 2013, p. 6). Direct assessment refers to "directly measuring student knowledge and learning, rather than linking it to seat time and grades" (Fain, 2014, p. 2). Professional competencies refer to exemplary professionals with the knowledge, skills, abilities, and behaviors that enhance organizational performance (SHRM, 2014; Campion et al., 2011; Shippmann et al., 2000; Competency Works, 2013; Fain, 2014; Moana, 2015).

According to the National Conference of State Legislatures (2018), the term competency is defined as a program or course designed for students to advance upon demonstration of mastery. Competencies taught by experts and learned by degree-seeking students at institutions of higher learning must include "explicit, measurable, transferable

learning objectives that empower students" (p. 3). Assessment of student performance and work must be meaningful and positive in nature, as students receive specialized and personalized instruction and support.

Construction of learning outcomes should be application based, but should also encourage acquisition of knowledge, skills, and dispositions that prepare students to become indispensable participants and contributors to their chosen field of study. Students must be aware of the instructional philosophy and objectives before engaging in a CBE because the demonstration of proficiency is a prerequisite for advancement throughout the program. Interventions and support must be provided by the degree granting institution of higher learning to ensure all gaps in knowledge and skills are filled prior to a student's advancement in the program.

The structure, strategy, and delivery methods of competency-based programs vary across the higher education market, as universities and institutions strategically differentiate their program offerings as a competitive advantage. Furthermore, the synchronization of CBE principles and methods with other modes of curriculum design, development, and delivery can enhance the value, effectiveness, and efficiency of learning in a higher education setting (Charles, Triscott, Dobbs, Tian, & Babenko, 2016; Knox, Gilardino, Kisten, Warren, & Anastakis, 2014; Nguyen and Losee, 2016; Nousiainen, McQueen, Hall, Kraemer, Ferguson, & Sonnadara, 2016).

Experiential Learning and Competency-Based Education

EL is a form of experience-based education that dates back to 1912, when William James theoretically philosophized on the topic of radical empiricism, which is the seminal work that epistemologically defines the tenets of EL (Kolb, 2014). In 1975, Kolb and Fry proposed a theory of applied EL, which takes place through the application of theory to practice and practice to theory within the academic and reality-based work environment with a focus on applying the EL cycle throughout the EL journey. The EL cycle requires a student to 1) take action in a verified reality-based environment, 2) reflect on observation, feelings, and behaviors and consequences experienced in the reality-based environment, 3) analyze, conceptualize and interpret findings and identify lessons learned in the reality-based environment, and 4) actively implement, apply and experiment theories, solutions, ideas, and behaviors in the reality-based environment.

Common types of EL courses include internships, externships, apprenticeships, simulations, and practicums. An EL course will focus on the student working simultaneously in the reality-based and academic environments to culminate the EL process cycle. The combination of a CBE strategy and an EL course curriculum development process can offer students an impactful learning process if curriculum outcomes are assessed using verifiable and proven methods such as authentic assessment (Knobloch, 2003; Riverbank & Jacobson, 2014; Rosen, 2011; Eyler, 2009).

Experiential Learning and Professional Competencies

Active experimentation and the choice of new experiences are key to the success of the stages of EL. Kolb (1984) has explained that "learning is the process whereby knowledge is created through the transformation of experience" (p. 35). Intrapreneurship, a concept practiced in many EL courses offered throughout higher education, offers student interns the opportunity to learn, practice, and experience the application of reality-based professional competencies

(Knobloch, 2003; Riverbank and Jacobson, 2014). As suggested by Eyler (2009), "Within professional programs, there is a long tradition of including field experiences as a way to build practitioner skills and facilitate the move from theory to practice" (p. 4).

Many internships are designed to give students exposure and experience across an organization. The purpose of EL opportunities, such as internships, is to prepare students to become accountable for their individual professional development. Students engage in the development of many professional competencies including collaboration in a team environment, building leadership, organization, time management, professional presence, analytical, persistence, and many other critical 21st century skills, abilities, and behaviors that can be beneficial to small businesses (Baytor & Cabrera, 2014; Boon, Van der Klink, & Janssen, 2013).

Internships offer students an opportunity to share the state-of-the-art professional competencies learned in degree programs in return for invaluable real-world experience. Small businesses' need for highly skilled workers with a fresh vision of the world is evolving (Zahra, et al., 2006). For example, strategic thinking and implementation are two weaknesses of small businesses. Interns can assist by diagnosing the small business on multiple levels, offering solutions, making suggestions for improvements, aiding in their implementation and facilitating strategic changes. Interns can naturally apply what they previously learned to devise solutions to existing problems or to participate in the improvement of the small business. This naturally occurring business environment is a perfect sandbox for students in competency-based degree programs that offer EL opportunities via small business firms (Degravel, 2011; Kolb, 2014).

Methodology

This exploratory, single case study, explains the conceptual framework for a CBE model being implemented at Commonwealth University (a pseudonym). Various studies and internet sources identify essential professional competencies necessary to establish a 21st century workforce (Scott, 2015; Degravel, 2011; Thagard, 2005; Chartier, & Contreras, 2018), but there is a lack of consensus on the most essential professional competencies employees and practitioners need to successfully work on the small business sector.

This qualitative study overlooks this limitation and seeks to establish a curriculum framework that is flexible and allows professional competencies and course outcomes to be interchangeably inserted or extracted from academic course and program curriculum. This research will explain the benefits of CBE and its value to the small business sector. The use of inductive reasoning throughout the construction of the literature review helps to build awareness of an opportunity to model curriculum solutions that specifically address the needs of the small business sector in the USA. Abductive reasoning was used to analyze and interpret data throughout the formulation of the case vignette and creation of the theoretical CBE instructional design strategy (Aliseda, 2006).

Phenomenological Single-Case Study

Choosing between empirical qualitative and quantitative research approaches depends on the scope of the research inquiry. While external inquiries may objectively result in generalized theory through the isolation of phenomena by applying methods of reduction and hypotheses testing; inside inquiries study the understanding and meaning of historically unique situations using inductive reasoning (Creswell, 2007).

This internal inquiry into the design of CBE instructional strategies to develop a 21st century small business workforce in the USA presents a single case study guided by the philosophical underpinnings of the phenomenological research approach (Creswell, 2007; Denzin, 2011). Gall, Gall, and Borg (2003) suggested that case study research involves the study of phenomena in its natural environment from the perspective of participants immersed in the phenomena.

The design of this phenomenological single-case study seeks to characterize a unique CBE based academic strategy through careful investigation of a sociological phenomenon based on individual perceptions and perspectives of faculty designing programs and courses within Commonwealth University (Riad, 2007).

A case vignette based on formal observations and interview transcripts are interpreted and described as the lived experiences of educators involved in the development of competency-based curriculum during a program redesign is presented (Patton, 2002; Yin, 2008). The case vignette describes the positive attributes and potential for growth and sustainability that CBE can offer the small business sector in the USA. The primary data in this study was triangulated using a combination of qualitative collection methods including a tenquestion unstructured interview with twelve educators and twelve small business management practitioners and entrepreneurs, a comprehensive internet search of fifteen small business and general business-oriented websites, five career websites, and an internet search of government websites. All educator participants in this study actively employs CBE in their virtual courses and programs they teach at institutions of higher education. Each of the small business management practitioner and entrepreneur participants in this study is actively engaged in the hiring and retention of personnel within the small businesses they manage. In combination, the primary data is then aligned with secondary evidence compiled from peer-reviewed scholarly articles (Creswell, 2007) to help validate the design of the competency-based curriculum framework. An academic-practitioner based strategy designed for implementing the CBE model into degree programs to support the small business sector in the US is presented.

Case Vignette

It was the best of times. It was the most challenging of times. The process of curriculum development varies depending upon the policies and resources provided by universities or institution of higher education. Commonwealth University, an institution of higher learning that competes in the national higher education marketplace, is currently experiencing an academic cultural paradigm shift within the School of Business and Technology (SBT). Over the past five years, the SBT experienced a shift toward an academic strategy and culture of innovation by adopting a programmatic competency-based and EL based curriculum design. This all started when academic leadership shared a strategic vision of becoming accredited by the Accreditation Council for Business Schools and Programs (ACBSP), prompting an intense interest from faculty to contribute to the transformation of SoBT programs from a traditional holistic curriculum model influenced by textbook publishers into a competency-based and EL based model guided by inputs from advisers and academics with varying degrees of instructional design, business and technology industry expertise. This academic strategy addresses three

critical factors and reasons for CBE to exist, including speed-to-degree, direct-assessment, and professional competencies. The possibility of reducing time spent on degree attainment with more focus on learning is of great importance in reducing the cost of a degree in higher education. This is a drastic paradigm shift from the traditional time and credit-based system in place today.

Commonwealth University, a student-focused university, was not only concerned about the time flexibility of CBE, and not just the direct assessment aspect of competency-based learning, it was most concerned with the development and authentic assessment of practical professional competencies desired by employers in the 21st century career marketplace. To this end, Commonwealth University leadership, faculty and employees agree that every decision made and action must positively impact their students. Commonwealth University faculty recognize that graduating learners can no longer be solely about how much knowledge a learner attained; rather, it is more important that learners develop the ability to think critically, improvise, make viable decisions, and act professionally under any circumstances. Students take on so much debt for an education that they deserve value, which equates to the development of wisdom, business acumen, confidence, and strong judgment -abilities and behaviors to meet the challenges of the 21st century career marketplace.

The CBE initiative at Commonwealth University was met with little dissent and skepticism. However, a faction of protectionist faculty members questioned the efficacy of the initiative to make certain it was the proper direction for the SoBT. The protectionism mostly centered around maintenance and concerns of academic integrity, policy related issues, and faculty workload. Questions and concerns arose and were expediently addressed by academic leadership, faculty committees, and business advisors, including the need to ensure academic integrity and freedom in the delivery of curriculum, how the competency-based programs would affect student financial aid eligibility, the real-world value of CBE, how instructors would be evaluated on effective teaching methods in comparison to prior evaluation criteria, and how will the successes or failures of the competency-based program be reported to Accreditors, the Department of Education, Students, and Institutionally. Commonwealth University leadership has been diligent and meticulous to identify and work with faculty leaders to establish a grassroots effort to construct the competency-based instructional design strategy and begin to transform the academic culture, while designing a plan for continuous improvements of the process. There is no secret to succeeding with the design, development, implementation, and continuous improvement of CBE. Making it happen required a great deal of planning, collaboration, cooperation, resources, and plain old hard work and effort by the entire team.

At Commonwealth University, CBE refers to the goal of helping degree-seeking students develop knowledge, skills, abilities, and behaviors in the discipline areas and functions necessary for success in their chosen careers. A key characteristic of a competency-based curriculum is that it immerses students in reality-based situation and they have the opportunity to apply professional competencies. In such situations, it's sometimes easier to learn from getting it wrong than from getting it right, and a competency-based curriculum allows for a naturally occurring learning ecosystem that challenges students and truly tests their business acumen.

Data Collection and Analysis

Data were collected during unstructured interviews with twelve educators and twelve small business management practitioners and entrepreneurs. The data were coded, and patterns

identified as shown in figure 2., indicating the 21st century professional competencies necessary for students to develop in competency-based programs in order to provide employers with talent and value throughout a career in small business (Miles & Huberman, 1994).

The data collection strategy of purposeful sampling explained by Patton (2002, p. 230), recommends that participants in primary research initiatives should offer depth of context relative to the phenomenon of interest in the study. Purposeful sampling was used to select a population of credible educator and small business management and entrepreneur participants actively involved in the development of competency-based curriculum, EL, authentic assessment, hiring and managing small business workers with 21st century professional competencies (Cooper & Schindler, 2006; Payne & Frow, 2006; Yin, 1994).

Educator (E) Practitioner (P) Indicated Professional Competency	Professional Competency	Definition
11 (E), 8 (P)	Leadership	One's actions, behaviors, and dedication to serve others as a representative of a cause or initiative; using wisdom and skills to lead the charge. Also, as the knowledge, skills, abilities, and behaviors demonstrated by an individual that is in a position to positively influence, inspire, coach, mentor, help, guide, or serve another individual or group in a given situation.
10 (E), 9 (P)	Personal Presentation & Professionalism	The ability to consistently demonstrate effective communication skills, including verbal communication, body language, written communication, and desktop publishing skills. Being well dressed and charismatic, having the ability to network and fearless of seeking out assistance. Works on managing and managing personal brand, social media use, and career.
12 (E), 12 (P)	Team Work	The ability to work in a group as an individual, contributing to the collective goals and objectives. Realizing that storming, norming and conforming is a real process when in a team environment. One's ability to work amicably and respectfully with a group of individuals. Recognizing the abilities and contributions of every teammate no matter their level in the company.
8 (E), 12 (P)	Critical Thinking	The act of deep thinking using analytical skills to evaluate using verifiable information and to make educated judgements without bias and special interest.
10 (E), 10 (P)	Organization	The demonstrated ability to collect, categorize, systemize and/or configure resources for the purpose of enhancing effectiveness and/or efficiency in a business.
12 (E), 8 (P)	Analytical Skills	Breaking down a topic, problem, or opportunity into component parts, explaining and rationalizing each component part, and building an argument on whether or not the topic, problem, or opportunity works as a whole and/or how to fix the problem, or how to capitalize on the opportunity.
12 (E), 12 (P)	Decision-Making	The ability to think critically and process information to come to conclusions, make judgements, and provide direction or to carry out an action.
12 (E), 7 (P)	Emotional Intelligence	The behaviors and abilities associated with controlling and managing ones' feelings and sentiments, or the ability to manage and control the feelings and sentiments of another.
12 (E), 12 (P)	Problem Solving	The ability to diagnose the direct cause of problems and opportunities in order to design and develop solutions to the problem or to capitalize on the opportunity. Effectively using a cause and effect analysis to recognize the symptoms of a problem, which leads to rooting out the cause of the problem.
12 (E), 12 (P)	Ethics	The manners, instincts, and principles inherent to the way people behave, particularly pertaining to the integrity, values and morals of individual behavior in all actions, thoughts, and interactions with others.

Figure 2.

Each educator and practitioner participant were presented with twenty possible 21st century professional competencies found within the small business literature. Each professional competency is a set of knowledge, skills, abilities, and behaviors that can be assessed during a competency-based learning course. Definitions of each professional competency were extracted, interpreted and formulated from the interview transcripts. The educator and practitioner participants unanimously agreed that ethics, problem-solving, team work, and decision-making are highly desirable 21st century professional competencies. The educators

unanimously found emotional intelligence to be of great importance, while only seven practitioner participants found it to be of significance. Critical thinking was identified by all practitioner participants to be of great importance in comparison to educators who found professional presentation, and professionalism and leadership to be of greater importance. Professional competencies from this list are used to demonstrate how a competency-based curriculum is formulated using EL tenets and authentic assessments in the following case vignette and theoretical constructs. Further research is necessary to identify and confirm the efficacy of each 21st century competencies identified. Each educator and practitioner participant were polled to identify and define a maximum of ten professional competencies that are critical to establishing a successful 21st century small business workforce. The data informed the construction of a CBE curriculum that facilitates the preparation and advancement of a 21st century workforce at Commonwealth university.

Professional Competency Formula

A professional competency is a written statement comprised of a complex set of knowledge units, demonstrable skills, abilities, and behaviors within a certain context (Fiddler, Marienau, & Whitaker, 2006). Commonwealth University academic committees collaborated to define knowledge as organized sets of concepts, principles, and facts that one acquires and cognitively stores for recall and informational purposes. Skills describe ones' aptitude for acquiring and developing action-oriented talents through learning or experience. Abilities are the combination of applied knowledge, skills, and behaviors that influences performance. Behaviors describe patterns of observable actions, interactions, emotions, and attitudes one demonstrates as a response to a specific set of conditions (O*NET OnLine, 2014; Fiddler, Marienau, & Whitaker, 2006). Development of professional competencies reaches well beyond simply skill or knowledge-oriented teaching and learning. Professional competencies support the goals and purpose of a small business, requiring one to perform a desired outcome by executing tasks, participating, contributing, and creating value through the continuous demonstration of human competence (Chyung, Stepich, & Cox, 2006; Naquin & Holton, 2003).

Competency-Based Learning, Performance, and Behavior Model

As academic-practitioner committees and advisers of Commonwealth University worked amicably together to formulate a viable CBE and EL based model, it was quickly realized that performance and behaviors are variables of great importance to assess. In this study, the terms CBE and competency-based learning are used interchangeably. An acronym for the newly designed curriculum model was established to usher in a time of great change and excitement, which is when the Competency-Based Learning, Performance, and Behavior (CBLPB) instructional strategy was derived. A number of professional competencies were identified by academic leadership of the University based on inputs from the advisers, and faculty were mandated to act as subject matter experts in the process of redeveloping courses by aligning professional competencies with the discipline focused academic topic matter based on the CBLPB instructional design strategy. The University employed learning scientists were extensively consulted, and the results of the CBLPB model were shared with a community of learning scientists to research and debate the efficacy of the instructional design strategy, resulting in the model depicted below in figure 3.

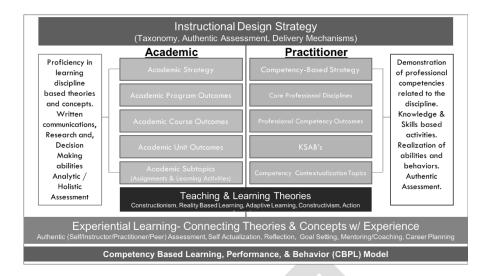


Figure 3.

Although chaotic at times, the academic strategy transitioned from a traditional degree model into a modularized competency-based model, allowing effective integration of professional competencies into the academic curriculum. In a traditional course, students achieved a total grade based on the combined performance across all outcomes. In a competency-based course, the student is evaluated as if each learning outcome is a separate course and needs to pass each outcome to complete all of the course outcomes. CBE recognizes that all students are individuals with different learning, performance, and behavioral needs. Every student comes into a program with different levels of knowledge, skills, abilities, and behaviors. Each student has his/her own identity, interests, personal life support and challenges that are ignored by the traditional higher education system.

The CBLPB instructional design strategy is a comprehensive approach that synchronizes competency-based learning with EL and authentic assessment principles. This instructional design model integrates practical knowledge, skills, abilities, and behaviors into an academic strategy to enable Commonwealth University to be a more agile institution with enhanced capabilities to articulate credit based on prior learning assessment and EL. The CBLPB model incorporates active learning-oriented teaching and learning theories into the design principles of each course, including constructivism, reality-based learning, adaptive learning, action learning, and constructionism. Each instructional design approach is aligned within the academic-practitioner curriculum design framework, coupled with EL and authentic assessment principles, to create competency-based courses and programs. The CBLPB instructional design model can be delivered online, on-ground, or in a blended learning formats. The premise of the CBLPB model is to prepare learners to demonstrate mastery of professional competencies in every course throughout a degree program. Instructors evaluate the authenticity of each student's ability to perform the prescribed professional competencies in a reality-based setting (Chyung, Stepich, & Cox, 2006; Naquin & Holton, 2003).

Rationale for adopting the CBLPB Model

Committees of faculty members, academic leaders and administrators, and small business managers and entrepreneurs examined several theories to design the CBLPB instructional design model. Traditional methods of instructional design have evolved in making

knowledge delivery and skill development interactive, but at a fundamental level that encourages surface learning and knowledge acquisition versus deep learning and application. Adoption of the CBLPB model differentiates business and technology programs in the higher education marketplace and enhances quality of learning and encourages employment readiness by aligning academic strategy and instructional design with employer needs and interests. Bridging academic outcomes emphasized in traditional education (research skills, critical thinking, etc.) with professional competencies (leadership, decision-making, etc.) enhances the chance of gainful employment. According to University records, student retention and satisfaction rates have increased since the adoption of the CBLPB model over a three-year period. The purpose and objective of Commonwealth Universities CBE programs is to develop individuals that possess 21st century professional competencies that innovate and advance business.

CBLPB Model in Action

At present, the CBLPB instructional design model is employed in all schools and programs throughout Commonwealth University, in both online and on-ground campuses. Seven out of the ten professional competencies listed in Figure 2. are integrated into the competency-based curriculum throughout every program in every school, including leadership, personal presentation & professionalism, team work, critical thinking, analytical skills, problem-solving, and ethics. Each professional competency is an outcome that is fully integrated and assessed in course curriculum using the CBLPB model as outlined in the academic-practitioner based process map in Figure 4.

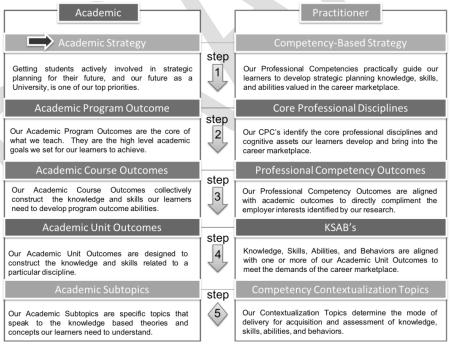


Figure 4.

Step 1 of the course development process involves academic committees and faculty course leads working on structuring the competency-based curriculum design, making key decisions such as the type of EL, resources needed for course development, and the Bloom's Taxonomy level of the course. Academic committees and career services administrators work closely with

business advisers to solicit constant input and feedback on programmatic and course curriculum. Students are actively involved in strategic career planning to ensure the program and courses taken are aligned with their career path.

In step 2, course outcomes are aligned with the academic program outcomes to ensure continuity and assurance of academic integrity, and core professional disciplines are identified to determine how chosen professional competencies are applied in discipline-based settings from a knowledge, skills, abilities, and behavioral perspective.

In Step 3, faculty course leads, and subject matter experts design academic course outcomes by conducting research and evaluating knowledge and practice materials provided by publishers and learning technology companies.

Throughout Step 4, faculty course leads, subject matter experts, textbook publishers and technology companies work together to design weekly outcomes based on a modularized structure that includes preparation, practice, and performance-based activities that immerse learners in reality-based situations that challenge them to use knowledge, skills, abilities and behaviors to culminate an academic course outcome. Business advisers are consulted to ensure the curriculum is rigorous and meets business needs and expectations.

Step 5 is considered the development phase. Using a backward instructional design methodology, faculty course leads, and subject matter experts start producing assignments and other competency-based learning activities. Backwards instructional design techniques start with the creation of authentic assessment rubrics consisting of self-actualization, performancebased, and peer review style analytic rubrics that detail expectations and varying levels of proficiency a student must demonstrate pertaining to knowledge, skills, abilities, and behaviors of the discipline based academic outcome (Scott, Ribeiro, Burns, Danyluk, & Bodnaresko, 2017; Dance, Davis, Fagerheim, Hedrich, Lundstrom, Martin, & Holliday, 2015). Strategic decisions made throughout Steps 1 through 5 direct the contextualization of activities, engagements, assignments, and deliverables developed in Step 5. Contextualization can take on many forms, including EL oriented activities such as internships, adaptive learning, and simulations. Once context of outcome and authentic assessment criteria are established, practice and knowledge assets are identified and developed to support and prepare the student for learning in the reality-based setting. All learning activities ensure students are preparing, practicing and performing academic subtopics and KSAB's, which are scaffolded to align with academic unit outcomes, academic course outcomes and identified professional competencies.

Conclusion

This study presented a theoretical CBE instructional design strategy that incorporates professional competencies necessary to develop a 21st century small business workforce. The higher education industry and the small business sector of the USA, through CBE, can provide students with the opportunity to engage in real world learning. Although CBE is an effective training method to prepare students to attain 21st century small business professional competencies, it is not the only instructional design methodology to design training. However, a CBE based curriculum, aligned with the present and future needs of small business, can enable students to become indispensable assets in the small business workforce. An examination of CBE, EL, and authentic assessment approaches, provides perspective on the foundational components of the CBLPB instructional design model. Academics and small business managers

should work together to benchmark professional competencies of importance to the small business sector of the USA.

Further research replicating the foundational principles of the CBLPB model and how it is applied is necessary. Future studies are recommended to focus on answering inquiries, such as what professional competencies practiced in competency-based curriculum build intrapreneurial acumen? What professional competencies are necessary to build a 21st century small business workforce?

Universities offering virtual degree programs can use the CBLPB instructional design strategy to incorporate small business professional competencies into program and course curriculum. Universities should actively pursue and engage small businesses to continue the development of CBE curriculum in pursuit of improving the small business workforce. If small business managers have a clear understanding of the value offered by the CBLPB instructional design model, the more likely they are to consult on benchmarking professional competencies, and to embrace the CBE movement in higher education.

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Do Management Accounting and Control Systems Stifle Innovation in Small Firms Led by Owner-Managers with High Individual Entrepreneurial Orientation? A Mediation Approach

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Abstract

How EO as a strategy manifests into entrepreneurial behaviors, like innovation, is an important research topic but not well understood. There is a gap in the examination of EO and entrepreneurial behavioral outcomes, since mediators likely exist. Research suggests that management controls systems (MCS) may serve as a mediator between strategy and innovation outcomes. We examine the relationship between an individual level measure of EO (IEO) and innovation level, and explore the mediating role of financial and nonfinancial MCS on that relationship. Results suggest that nonfinancial MCS partially mediate the relationship between IEO and innovation, while financial MCS do not.

The role of context in the evolution of a serial entrepreneur

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Abstract

Entrepreneurial research often focuses on the psychological traits of the entrepreneur but rarely on the notion that under certain circumstances entrepreneurship may be equally driven by external factors outside of the founder's control. This paper looks at the 40-year history of a serial entrepreneur and identifies five types of business ventures driven by interaction between contextual factors and the personal attributes of the entrepreneur. These five types are the "advised" venture, the "safe harbor" venture, the "accidental" venture, the "greener grass" venture, and the "passion" venture. The paper closes with a call for future research to include situational context in defining what creates and motivates entrepreneurs.

Introduction

The nature of an entrepreneur has been a topic of academic interest for several decades. Most studies have looked at the role that personality plays in developing an entrepreneur (Schjoedt & Baton, 2007; Baer, 2015; Rauch & Freez, 2007; Zhao et al, 2010). Other areas include entrepreneurial alertness and risk preference (Karabey, 2010), self-efficacy and prospect theory (Hsu et al, 2017), skill sets (Bonnstetter, 2012), action theory (Frese, 2009), and neuro-cognition (Nejati & Shahriar, 2013).

The Enterprise Council on Small Business (BtoB, 2009) proposed that entrepreneurs could be classified into three basic profiles:

- 1. Mountain Climbers (2% of small business owners)- entrepreneurs motivated by growth and achievement.
- 2. Freedom fighters (24% of owners) "corporate refugees" seeking life beyond the company.
- 3. Craftspeople (76% of owners) people that form a business to pursue their trade.

Perhaps the most interesting way to classify entrepreneurs has been offered by Barclay's in their report entitled *The Psychology of Entrepreneurship* (2015) who identified entrepreneurs as either type A (artistic, well-organized, highly competitive, emotionally stable, neither extroverted nor introverted) or type B (traditional, spontaneous, team-working, emotional or in touch with emotions, and neither extroverted nor introverted). The study also offered that some people want to be entrepreneurs to satisfy issues related to locus of control and self-efficacy while others became entrepreneurs due to circumstances outside of their control. It is these "necessity entrepreneurs" that are driven to start a business due to the context of their situation.

Dr. Thomas Matthews has been a serial entrepreneur for over 40 years. He exhibits the prerequisite traits of a serial entrepreneur as he moves from business to business (Goldman, 2017). However, as he describes his motivations for starting each of his business ventures, it becomes clear that an integral part of his decisions to pursue the venture was not just the recognition of a new opportunity but also the specific circumstances surrounding him that

motivated the new business venture. Analysis of these circumstances indicate several types of entrepreneurial endeavors. These include:

The *advised venture* - a business that an entrepreneur enters based upon the influence of a trusted other.

The *safe harbor venture* - a venture that allows entrepreneurs to establish protective barriers on some aspect of their business that they feel they do not have the time, expertise, or financial wherewithal to provide for themselves by accepting a junior position in a larger practice.

The *accidental venture* - a venture that an entrepreneur, especially a professional service provider, discovers as they seek to expand their revenue stream beyond timebased billing of services.

The *greener grass venture* - a venture that often arises over frustrations related to the revenue limitations of a professional service provider. A greener grass venture attempts to shift from a professional service model to a product-based model.

The *passion venture* - a venture that captures an entrepreneur's heart and mind and can become embedded into their very identity. For this reason, passion ventures are the exciting and dangerous business that any entrepreneur can entertain and enter.

Conclusion

Entrepreneurs and entrepreneurship are recognized as a critical element in economic development and job creation. To better understand what makes an entrepreneur, research has focused upon the personal attributes of the individual and how these attributes enhance new business creation. In their report Barclay's mentions a second type of entrepreneur, the "necessity entrepreneur", who become entrepreneurs because they have little or no choice.

Gender, ethnicity, education level and regions of poverty and limited economic development can all be reasons why people pursue entrepreneurial activities. Context, therefore, may be another reason for new business creation and must be included in any research that attempts to understand what drives new business venture creation.

The experiences of Dr. Tom Mathews indicate that many of his ventures were motivated by contextual factors that included either a recognized weakness in a current business practice or a serendipitous encounter. These contextual factors interacted with the personal attributes of Dr. Mathews that that led him to new business ventures.

With the addition of context, entrepreneurship endeavors become more than just the passion of the independent, risk-taking individual but can also be a path taken due to necessity or need.

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The Collection of Sales and Use Taxes by U.S. Small and Micro-Sized Businesses: Investigating the Accounting and Compliance Issues in Colorado

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Abstract

Since the June 21, 2018 ruling from the Supreme Court on South Dakota v. Wayfair, the discussion of sales tax collection and its impact on small and micro-sized businesses has become increasing heated. The Wayfair case gives US States a broad authority to require online retailers to collect sales tax, which, according to retailer eBay, places "crushing burdens on small online businesses, causing many to curtail operations and damaging the national economy (Williams, 2018)."

This study explores the accounting and administrative burdens that the collection of Colorado sales and use taxes place on small and micro-sized entities, and the role regulatory agencies play in helping navigate this regulatory burden. The project utilizes an interpretivist perspective using data obtained from 38 semi-structured interviews with small and micro-sized business owners and managers in Colorado, to explore whether the complexities of the sales tax process creates regulatory burdens for such entities. In addition, a further five interviews were conducted with representatives from various Colorado tax-regulatory agencies to investigate the levels of sales tax support and guidance currently being provided.

The interview data identified a range of important themes and issues related to the sales tax impact on small businesses, which included: the relative importance of sales tax revenues, the complexity and confusions within the system, the push for online filing, a lack of audit and educational resources, the importance of record keeping, the use of accounting software packages, and the reliance on costly third-part accounting services and tax advisors. Despite some assistance from tax regulatory agencies, small and micro-sized entities in Colorado face sizeable accounting and administrative regulatory burdens from the sales tax process that consume valuable management time.

Keywords: Sales Tax, Colorado, Micro Business

A Conceptual Model of Beliefs that Influence Attitudes Towards Money in Mexico: An Exploratory Study

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Abstract

While there is research about beliefs and attitudes toward money in developed countries, research in developing countries is limited. This is an exploratory study that develops a conceptual model based on money psychology theory in Mexico. The model includes three cultural, social, and moral beliefs that influence attitudes toward money.

INTRODUCTION

Economic behaviors including expenditure, purchase, saving and investment, among others all constitute an important part of social behaviors that people perform in everyday life (Lozano & Fuentes, 2007). But a high percentage of Mexican citizens live in poverty and lack possibilities and abilities to lead a higher standard of living (Banamex, 2008).

The absence of financial education can be, to a large extent, one of the biggest problems facing the population of Mexico. This reality affects seven of every ten Mexicans, "since financial culture is not ours, we spend more than what we have and then we do not know how to face the debts "(Romo, 2015 quoted by Chávez, 2018). Spending more than we earn, is also due to a large extent because people do not record their expenses. This reality affects more than 63.4% of the population in Mexico, thus preventing planning cash outflows and those who say whether to do so mentally, according to the National Survey of Financial Inclusion (CNVB, 2015).

In the survey of financial literacy of young people in Mexico, it was found that 20% find greater satisfaction in spending money today than to save it for the future and 18% said they feel the impulse to buy some products, although they do not need them. Likewise, 54% of young people make purchases that come out of their budget, and to remedy this situation, they resort to their savings, which can interfere in achieving an adequate control of their finances (Banamex, 2014).

Young people distinguish necessary and unnecessary expenses as follows. The first include transportation, children's school and school supplies, mobile telephone, rent, food, services (electricity and water). Unnecessary expenses include fun and leisure (going to restaurants, cinemas, centers nightlife, casinos, parties) and things that they like, but that "are not indispensable", such as clothes, shoes, electronic devices (smartphones, tablets, televisions) or going to the gym (Banamex, 2014).

Of the young Mexicans, 30% do not show an interest in financial culture. They prefer to spend rather than save, according to the National Commission for the Protection and Defense of Users of Financial Services (Economista, 2017).

Although, there are studies related to financial education and its relation to financial decisions that are made, and others related to personality traits and the level of income or generation of wealth based on a preliminary theory of actions versus money, which are a classification of

beliefs. However, no studies have been found that discuss in depth the relationship between beliefs about money and financial decision making (González, 2016).

People interact with each other through money in order to be able to obtain and cover all their personal and social needs. This perspective of analysis covers its mediating role in the behavior of individuals. Over the years, this mediating role of money has led to the reconversion of its relationship with individuals. This new relationship is based more on the search for money as an end in itself. The study of the psychology of money, as well as that of other topics related to everyday behaviors has not received much attention in scientific research. Studies on money come from philosophy as well as from psychoanalysis or even religion. This fact is due to its link with clinical or pathological issues and its qualified character as a materialist (Luna & Li-Ping, 1998).

If you do not talk, research and understand the emotional part associated with financial beliefs, financial learning will not be significant in the individual. As much as people learn technical tools, financially speaking, if there is a cognitive block on economic progress, the result will be the same (González, 2016). So, the objective of this research seeks to identify which beliefs affect the relationship with money that affects their financial decisions.

THEORETICAL FRAMEWORK

The classic definition of beliefs proposed by Moscovici (1979), indicates that these are social representations, explanations, concepts or statements socially shared by a cultural group. Furnham (1984) evaluated the behaviors and beliefs about money using he Money Belief and Behavior Scale (MBBS). The MBBS contains six behavioral factors: power / expense, obsession, retention, security / conservative, desire for more money and effort / skill. Furhnam found sociodemographic differences, as men were more concerned about money than women, which were more conservative. In addition, young people value money as a means of power and were less careful in their spending. Also, people with lower levels of education perceived that they were poorer in childhood compared to those with higher education.

Yamauchi and Templer (1982) found five factors of attitudes towards money: power-prestige, time of retention, distrust, quality and anxiety. Finding indicated that people can maintain the attitude or anxiety among certain people with respect to money. However, for others money alleviates their anxiety, while others feel anxious.

Engelberg and Sjoberg (2017) investigated the obsession with money and the perception of risk, in which the most obsessive people with money, presented a greater vulnerability to the risks related to economic loss, but also to a less secure management of their money. Where people with low budgets lean more towards excessive spending and borrow money. Also, people less obsessed with money, are more educated and do not see money as a tool to influence others.

Klontz, Britt, Mentzer and Klontz (2011), focused on disordered money behaviors of which they found: compulsive hoarding, workaholism, financial dependence, financial empowerment, financial denial, financial entanglement. They found that the compulsive hoarder has identified as a person who has had difficulty living and feels emotionally attached to possessions, and they tend to have lower levels of net worth. Workaholics seem to have higher incomes, but have credit card debt, which can serve to justify their compulsive need to work. The profile that is identified with financial dependence are the least educated and the lowest income; those of

financial habilitation, tends to be younger and single people, with lower levels of education and net worth, with a renewable credit card and to maintain their affiliation in the group they feel the needing to give their money. Financial denial its characterized by young and single women with lower levels of education, income and net worth who have revolving credit card debts, and financial entanglement behavior, those with higher income are those who are identify with this profile.

Klontz and Britt (2012) emphasize that money disorders are transgenerational beliefs that develop in childhood and these have an influence in adult behavior. There are three money categories that have a negative impact on financial health: avoidance of money, status of money, and worship of money. These belief patterns are associated with lower income levels and more revolving credit.

Money has historically been given a negative quality that usually works as "acid" that dissolves social life. Wilkis (2018) affirms that money is "a means to decipher the collective life of a society", that using it, produces social alterations. However, money allows building in social life relationships between parents and children, between lovers, between political leaders and followers, between religious leaders and followers. From the point of sociology states, money can be understood from three dimensions: struggle, comparison, and power (Moscovici, 1979).

There are certain conceptions that see money as an evil, an element that distorts human virtues and dissolves social bonds; money tends to dominate the regime of opinions and feelings, but we can also observe that money connects people through of hopes, affections, desires, respect, pride, hatred and conflicts (Wilkis, 2015). Provenance influences their subjective perception and assessment. At the same time, the meanings of money change to the extent that subjects are located at different times in their life cycle. Thus, money not only has an economic value, but also carries a subjective symbolic meaning expressed in affections, emotions, feelings, desires and attitudes that surpass the tangible. In this way, each person establishes a symbolic and emotional interaction in their contact with money (Luna, 1998 cited in Denegri, 2010).

Another research that deals with the beliefs and their influence in the economic decision-making of women and how those decisions influence their self-realization, González (2016) concludes that the social aspect has a strong influence. It determines the prevalence of social beliefs over personal ones, creating an existential and emotional instability, showing that women are not satisfied. It seems that money and self-realization were separate. Socially we have created and widened that fracture between the internal and external, for not working together the financial and the human.

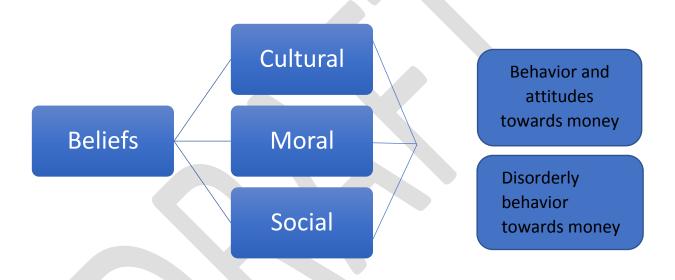
Zelizer cited in Vera (2009), links culture and economics, affirming that the economy has an irreducible cultural element and without this, it can't understand economic phenomena. Consider that it is necessary to fully integrate the culture of its shared meanings and its representation in objects and practices, in the analysis of economic phenomena, hence the importance of including culture as a dimension to understand the behaviors that people have towards money.

Wilkis (2015), introduces the concept of moral capital analyzing the disputes of moral meanings about people and their actions, finding that the accumulation of moral capital is a way to access resources and power. Judgments and moral evaluations are valued and weighted by people. Wilkis concludes that moral hierarchies are defined monetarily, in which money is considered

a social classifier. People are classified as being "payer" "loyal", "compliant", "respectable", "generous", "Worker" or "disloyal", "non-compliant", "greedy" and "vague" are moral judgments that people struggle to achieve and impose and express litigation by defining the hierarchies that enable or prohibit the circulation of money.

Corley (2016) defined the term "victim ideology", as those people who complain instead of taking action on their financial situation, refer to thinking that poverty is beyond their control and that luck is in the hands of factors external. Corley concludes that what makes the rich has to do with the way they do things, which has to do with the internal part of the person and not external factors. Therefore, the proposed model includes cultural, moral and social beliefs, which has to do with what we think or learn (Fig 1).

Fig. 1 Conceptual Model of Beliefs That Influence Attitudes Toward Money



CONCLUSION AND DISCUSSION

This research was only exploratory. It needs an exhausting literature review that supports the actual model proposed with those three variables: cultural, moral, and socials. The additional research must indicate how these variables influence the attitudes and behaviors, either positively or in a disorderly behavior towards money. Also, the research can be enlarged to a global perspective. Is there a discrepancy of the variables in the model between developed and developing countries? The model could be expanded to including other variables such as religious beliefs and the influence of historical context.

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Five Team Building Practices for Virtual and Multicultural Teams

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Abstract

Globalization and economic drivers, including the need for special skills and talents has created a workplace made up of virtual multicultural teams (VMTs). Managing these teams to achieve optimal performance can be a challenge. Major team issues that arise on VMTs include issues related to trust, communication, culture, time zones, languages, and technology. Using Richard Hackman's framework for building an effective team, this paper identifies five team building practices that support creating an effective VMT. These five conditions include the following: teams must be real, teams need a compelling direction, teams need an enabling structure, teams need a supportive organization, and teams need expert coaching (Hackman, 2006). By deploying key strategies and activities to support these practices, organizations can build high performing VMTs.

Keywords: multicultural teams, virtual teams, team building, leadership,

Globalization and innovation in technology have changed how companies are organized and structured. Competition for global markets, the cost and tax incentives of off shore work, the ability to maintain a global presence with extended work hours, and the ability to leverage expertise from a large pool of talent have led to the adoption of virtual teams in many organizations. Due to the global nature and diverse locations in which team members live, many virtual teams are also multicultural teams (Staples & Zhao, 2006).

A virtual team is defined as people who work together, but cannot frequently meet face-to-face because they work in different locations or time zones (Fisher & Fisher, 2011). A multicultural team, on the other hand could be virtual or co-located. Virtual teams are characterized by having team members who come from different social, cultural, and professional backgrounds. Often, these team members have learned different values, languages and behaviors, which make managing these types of teams difficult. Wigg Berg (2012) asserts, "teams consisting of members with diverse cultural, professional, and / or personal backgrounds tend to achieve either excellent or miserable results" (p. 407). Consequently, how a leader manages these teams is critical to success. Team building is an important part of building any strong team, but is even more important in managing a virtual multicultural team (VMT). Understanding the unique issues, needs and challenges of VMTs, and ensuring that team building activities and approaches are consistent, will contribute to VMT success.

This paper describes some challenges and issues associated with VMTs, including trust, communication, culture, time management, language barriers, and technology. This paper also focuses on team building practices that can contribute to improving clarity of roles, trust and communication between team members, and respect for diversity in a VMT.

Major Team Issues and Challenges

Issues can occur in any situation on a team however, it is particularly common to experience frequent issues on a VMT as opposed to a co-located team. Teams that are not located together are at greater risk of becoming detached from one another, and disjointed in the way they work towards their objectives. A disjointed team is an ineffective team. There are several major issues that can arise on a VMT, including trust issues, communication issues, cultural issues, dealing with different time zones, language barriers between team members, and technological issues.

Trust

Trust affects VMT's by eroding a team's ability and willingness to work together in a cohesive manner, with openness and transparency. Without trust, team members become isolated from one another as their distrust leads them to limit their interactions with team members. Lack of trust in co-workers affects a team's ability to be comfortable being open, admitting to and resolving mistakes, sharing ideas, and asking for help (Fisher & Fisher, 2011). When team members do not trust another team member, the excluded team member can feel isolated, particularly in a virtual environment. It is difficult for an isolated team member to build up the reciprocal trust required to return from a place of isolation on a virtual team. Trust is the foundation of team communication, collaboration, and interaction, and therefore must be the foundation of a VMT.

Illustration of importance of trust in a team. An environment that illustrates the need for trust on a VMT is in the healthcare industry. A virtual healthcare team where the doctor is using a robot to operate from hundreds of kilometres away from the patient must have a high level of trust and cohesiveness. The issue of trust is significant in this environment because developing partnerships, relationships, and demonstrating competence, are critical for medical teams to achieve positive outcomes in patient care (Michelson, n.d.). A lack of trust on a healthcare team can result in a lower level of patient care, or even loss of life. Decisions are made constantly and rapidly by a medical team, and are often critical to saving a life. Without trust on a team of doctors and nurses the consequences to a patient could be devastating. A high level of trust within any healthcare team could lead to higher capacity for the team to make strong, positive decisions and to achieve the best possible outcomes for patients. VMTs from all industries that build and maintain trust have a greater chance of communicating together effectively. Building trust also drives the quality and frequency of communications on any VMT, and is a key factor to increasing the success of team outcomes (Michelson, n.d.).

Communication

Another significant issue that can arise on virtual and multicultural teams is difficulty with communication. Effective and consistent communication is a critical component to the productivity and success of any team, but on a VMT, communication has particular significance. Ineffective communication can prevent a team from meeting its performance objectives. With the addition of elements such as being geographically dispersed and team members being culturally different, new layers of complexity are incorporated into a team situation.

Communication is not just about what people say, but how they say it, and when communicating across distances, the inability to read body language and interpret physical

cues can distort how employees perceive messages from fellow employees. If team members do not know each other well enough to understand the intent of another party instantaneously, a misperception of a speaker's intent can lead to offended listeners, without the speaker even realizing they have committed an offense. Body language also helps a speaker to recognize whether a listener understands or agrees with what has been said (Fisher & Fisher, 2011), which is critical in team meetings, but can be difficult when teams are not co-located. Communication style can also be a source of conflict and miscommunication on a VMT. If one employee is from a culture where discussions are lengthy and teams use consensus to make decisions, but the other is from a culture where discussions are quick and teams do not use consensus to make decisions, it could lead to issues. The distance between employees could further diminish cohesiveness when, after a conflict has occurred, there is no way for them to meet in person to discuss and resolve their issues.

Illustration of importance of effective communication in a team. In the mining industry, and all other industries where there are high safety risks, communication is extremely important. When an emergency occurs in a mining situation there are likely lives at risk and response teams must know instantly how to react and correspond with each other. An important factor that dictates the level of success of a response team is how effectively they communicate with one another to reach their desired outcomes. In a mining situation, the team could be spread across the country, each person having a specific role to play. Even on-site, team members communicating from above-ground could seem worlds apart from those working and communicating from below-ground, and the manner in which they communicate will have a major impact on the ability of the team to function effectively. Critical elements for the communication process in an emergency situation are similar to those required on any VMT. They involve understanding roadblocks that can affect a team's ability to communicate, and understanding how to actively listen (Torma-Krajewski, Ferrier, Beran & Powers, n.d.). Active listening requires a listener to be engaged in trying to understand the speaker's situation, using concentrated focus on the speaker's message, and ensuring through feedback that the message has been understood. Effective communication in any team situation is essential, and ensuring that communications are clear, timely, precise, and presented in a logical sequence avoids confusion and increases the potential for a positive team outcome (Torma-Krajewski et al., n.d.).

Culture

A third significant issue that can arise on VMTs is cultural differences. Cultural differences can make it difficult when teams are working together as they can make people feel and think differently from each other. This can influence how people correspond with each other. If each different culture does not understand and respect the other cultures on a team, it leaves the team open to misunderstandings and promotes a lack of openness for other views and practices. Country-of-origin, religion, and life experience can be major differences between team members and can serve to either bring people together or create dysfunction. Bringing differences into the open and being transparent about them can help teams achieve a positive outcome and bring team members together rather than separating them.

Illustration of importance of respecting culture in a team. In some cultures, it is rude to suggest that you did not understand what someone said, so in a virtual team meeting with different cultures involved, when team members are asked if they understand what has been said, some members might say yes when they really do not understand at all (Fisher & Fisher, 2011). It is critical to understand cultural differences between team members, and to

recognize that team members on a culturally diverse team could interpret situations differently. Any global business today must be aware of, and plan for culture differences in the workplace. With employees from all over the world, a company could have many cultures represented in the workplace at the same time. It is important for employers to ensure that cultural sensitivity and acceptance is a systemic part of the overall organizational culture, and that this is actively applied to team environments. This does not mean that every culture should have the ability to use only their own culture in the workplace, but that employees should treat each individual's culture with respect and recognize that there are differences, which could affect the way individuals think and perceive situations.

Developing sensitivity training and being open with employees about the expectations of the organization toward cultural differences can help to prevent issues. Ensuring that the processes employees are expected to follow are clear will allow those whose cultures are different to express concern and seek resolution. If an employee is not comfortable giving a clear, honest 'no' when asked a question by a superior, it is important for that superior to understand if the issue is rooted in culture, and let the employee know that in their work environment it is not only considered acceptable, but is an expectation from management that employees say no when necessary. Understanding cultural differences and having a culture that appreciates and copes well with these differences will lead to more effective and capable VMTs across an organization.

Time Zones

It is difficult enough when teams are spread across several different geographic locations, but when those locations are also in several different time zones, it adds a greater level of complexity to team collaboration. Coordinating work schedules and meetings becomes very difficult when team members need to participate at inconvenient times, such as in the middle of the night or on holidays (Fisher & Fisher, 2011). Work hours become a significant element to consider when booking a group meeting, as team members could be from all over the world. Depending on their time zones, it is possible that only one or two team members will be the ones who must consistently work outside of regular working hours in order to attend meetings and collaborate effectively with the team. This can lead to inequality when some team members are regularly inconvenienced, or only certain team members consistently receive overtime pay for attending team meetings.

Language

The language barriers on a team can be a management challenge when there is no common language spoken by all staff members. Languages can range from completely different languages, such as Japanese and English, or languages within a language, such as Australian English and Canadian English. While completely different languages cause most trouble, languages that are only somewhat similar can also be a concern. A simple phrase such as "how are you going?" in Australia, versus "how are you doing?" in Canada can cause some confusion to English speakers unfamiliar with the meanings of words in the other language and could lead to miscommunications or conflict. When there is no common language, practices can get distorted, leading to inconsistent execution, which leads to a difficult situation for management (Jordan, 2014).

A leader could alleviate this issue among speakers of similar languages by defining relevant business terms and sharing the definitions across the organization, and making the fact that there are differences open and transparent. For situations where there are employees whose languages are completely different from one another, management could use interpreters for verbal communications and translation services for written communications.

If cost is an issue, another option when seeking employees is to set essential criteria that clearly state the individual must speak a certain language at a certain level to qualify for a position. If seeking employees with highly specialized capabilities, a leader could hire a candidate with the agreement that they take training in the language required and achieve a certain level within a specified period.

Technology

Teams use technology on a regular basis to communicate and collaborate with each other. Effective technology tools and a team's ability to use the available technology are critical to a VMT. Some technology tools that are used by virtual teams are email systems, software for collaboration, video and teleconferencing tools, instant messaging (IM) systems, and the telephone. For most of these tools to work, an organization must have a fast and stable internet connection, which could eliminate the possibility of added frustration resulting from technical difficulties.

It is easy to forget when using technology that you do not necessarily know what the other party is doing when you send a message. When sending an instant message, the chances are good that you could interrupt someone when they are in the middle of completing another important work task. Understanding that an immediate response might not be possible could avoid potential misunderstandings. Leaders of VMTs could set standards for the use of technology to provide team members with a baseline of what is acceptable behavior and what is not (Fisher & Fisher, 2011). If all team members understand the expectations and agree to conform, then a team can limit the number and seriousness of potential misunderstandings and offences. If a leader includes the team in deciding what the standards are based on team preferences, it is more likely that team members will conform.

Five Practices for Team Building

Despite some of the issues and challenges identified, scientific research shows that diverse groups are more innovative than homogeneous groups (Phillips, 2014). Team building and team development exercises are effective ways to improve team performance and to limit common issues and challenges on VMTs. Team building activities help promote better teamwork, which is one of the key factors associated with an organization's success. These activities generally consist of workshop exercises, and learning and training programs, which helps team members grow closer and work together effectively (Heathfield, 2017).

The book "Leading Teams: Setting the Stage for Great Performances" by Richard Hackman (2006) describes five team building practices that can contribute to having an effective team. The five practices for an effective team are as follows: "teams must be real; teams need a compelling direction; teams need an enabling structure; teams need a supportive organization; and teams need expert coaching" (On Teams, 2013, p. 29). In Hackman's opinion, these conditions are as important for VMTs as they are for co-located teams.

Teams Need to be Real

In order for teams to be successful, each member of a team must understand what their role is. While this might be straightforward in smaller teams, in large teams or organizations, it could be more complicated. Having clear role expectations is a key to success, so each team member must understand the duties and functions required of their position. Once role definition is clear, creating a team identity is an important part of building a successful team.

Team identification activities and strategies are an important part of making the team "real". Some team building activities to support team identity include using social networking to create a team page or twitter feed, having team t-shirts made and shipped or creating a team logo or a team slogan (10 Team Building Exercises, 2017). However, despite the new and innovative ways to develop cohesiveness as a team, for VMTs, face-to-face meetings remain one of the most important elements for forming a strong team identity. While face-to-face meetings are easier on co-located teams from a logistical perspective, virtual teams can still take advantage of meeting face-to-face by using technology tools, such as Webex.

Anu Sivunen (2006) outlines the results of his study with four virtual team leaders from four different international organizations whereby interventions were completed to improve team identity. The team building strategies to improve team identity that were used included "catering for the individual, giving positive feedback, bringing out common goals and workings, talking up the team activities, and face-to-face meetings" (Sivunen, 2006, p.353). The results of this study indicated that, talking up team activities and face-to-face meetings were the most effective strategies for building team identity (Sivunen, 2006). Once role definition is clear, a leader must constantly work to create identification with the team and keep members focused on their common purpose.

Teams Need a Compelling Direction

Clarity and certainty of purpose is important to the success of a VMT. While this is the responsibility of the team leader, engaging the team in the creation of a team charter is important (Fisher & Fisher, 2011). A team charter should clarify goals, define key results, and identify benchmarks (Fisher & Fisher, 2011). The leader can then share the purpose and goals with the team in creative ways. One creative option is to put the team's purpose and goals onto an office item that is used by team members daily, such as a mousepad. If team members have different first languages, the leader can translate each mousepad into each team member's first language.

Teams Need an Enabling Structure

Teams need a common structure and standards of conduct in order to be successful. In 2012, Google launched a program code-named Project Aristotle to study 180 of the company's teams over a two-year period, with the main goal of understanding the secret of successful teams (Duhigg, 2016). Google, through its research for the Aristotle Project, identified the importance of common structure and standards for forming an effective team. The company's best specialists, including statisticians, psychologists, sociologists, and engineers, gathered under the project scope. They did not find any visible patterns showing that a mix of specific personality characteristics or backgrounds is decisive for a team's performance (Duhigg, 2016). The researchers concluded that "group norms" is the key factor contributing to a team's effectiveness (Duhigg, 2016). The "group norms" concept outlines traditions, standards, rules, a group culture, and morale as what integrates and consolidates people into teams (Duhigg, 2016). One of the most important and effective "group norms" is the ability of team members to have free opinions and share their views without fear of recrimination (Duhigg, 2016).

Team building activities that can support building an enabling structure include developing a team code of conduct. A code of conduct should highlight the common behaviors that are expected of team members, including healthy ways to resolve conflict. For VMTs, there should be specific norms related to respectful behaviors around diversity and managing time zones. One rule that could be implemented is that if a contentious issue is not resolved with three emails, then the involved team members must engage via a telephone call

as a next step. The code of conduct document should be prominently displayed in a pace visible to each team member and be included in a shared document space (Code of Conduct, 2014).

Teams Need a Supportive Organization

A supportive organization is critical to the success of a VMT. A supportive organization refers to an organization that has human resource practices in place to support VMTs, including supporting technology needs and diversity. In addition, from an organizational context a formal and informal rewards system must be in place to support the success of VMTs.

From a diversity perspective, cultural heritage has a profound influence on the way people think, feel and behave (Adler & Gundersen, 2008). In the environment of global business development, multicultural teams are common however, like any other organizational structure they must be effectively integrated and united to provide their best performance. Diversity makes communication, reaching agreement, and trust development more difficult. Understanding the impact that diversity has on a VMT is essential to the development of useful team building exercises. In their study related to the effects of cultural diversity in virtual teams versus face-to-face teams, authors Staples and Zhao (2006) examined "the effect of cultural diversity on team performance and whether this effect changes depending on the communication mode used" (p. 390). The study group was made up of 380 participants on 79 teams, from ten different countries. The results were interesting, but not surprising. They showed that homogeneous teams had higher levels of cohesion and satisfaction, resulting in better performance when compared to heterogeneous teams. Heterogeneity was measured using the Blau heterogeneity index (Blau, 1977). Interestingly, the results showed that virtual heterogeneous teams performed better than face-to-face heterogeneous teams. This study offered some interesting perspectives on team building exercises. They concluded that while face-to-face kick off meetings are generally considered the best practice for virtual teams, this may be more successful for homogeneous virtual teams and may not be as helpful in heterogeneous teams. The authors suggest that in heterogeneous virtual teams, face-to-face meetings should come later when trust relationships are more formed and team identity has been established (Staples & Zhao, 2006).

In addition to face-to-face meetings, another interesting team building activity for virtual teams is the use of randomized coffee trials, which involves a leader setting up a series of random one-to-one virtual coffee chats so that people who might not otherwise form a relationship can bond (Soto, 2016). Thus, the task of a multicultural leader is to use advantages, and limit disadvantages of team diversity. Adler & Gundersen (2008) assert the productivity of a team does not depend on the presence or absence of a team's diversity, but on how well a leader manages team diversity. A supportive organization ensures that practices to support teams take into account the inherent diversity of a multicultural team.

From the perspective of technology, VMTs require an organization that supports the unique needs of these types of teams. To support team building and effectiveness, having technology and applications to support interactions across time zones and shared document spaces are critical. Virtual polling is another supportive technology that can encourage interaction among team members by posing questions and letting members easily respond (10 Team Building Exercises, 2017).

Supporting organizations also have formal and informal reward systems to support recognition. Acknowledgment, recognition, expressing appreciation, giving feedback, and listening to views are powerful motivating and inspiring factors for teams (Fisher & Fisher, 2011). A powerful activity for team communication development is the giving and

exchanging of feedback. This responsibility belongs not only to the manager, but also to all team members. Feedback serves a wide range of functions and purposes, including reinforcing, celebrating, recognizing, supporting of continuous improvement, and correcting. The feedback process is a powerful tool for the development of team communication, and the stimulation of the team, and each team member's performance should be a driving force in the process.

There are five steps to giving helpful and effective feedback: stating the purpose of the feedback; describing observations and perceptions; listening to others views; jointly agreeing on what actions to take; and showing appreciation (Fisher & Fisher, 2011). Purposeful appreciation towards others is one of the most powerful communication tools. If people are genuinely valued, they will respond and perform better. The following tips for leaders relate to employee appreciation activities within the team building process: focus on specifics and give detailed explanations why the job was good; let employees in and be transparent; celebrate success; recognize all levels, not just top performers; and commit and delegate to employees (Crampton, 2016). Other ideas include sending simple electronic cards to team members to let them know they are appreciated. It can also involve sharing good news stories at meetings, having a year-end celebration, or developing group posters to highlight the successes of the team. All of these options can help to bring a team together and make team members feel valued and appreciated.

Teams Need Expert Coaching

Lastly, it is the role of the team leader and coach to bring all of these activities together with the goal of forming an effective team. The team leader must not only manage individual performance but also manage team performance. Two of the most important components of being an effective coach include developing trust with the team and having excellent team communication.

In a trustful environment, people feel confident in themselves, and in each other; and management feels confident in teams that are built on trust. However, trust is vulnerable, especially for a virtual team (Fisher & Fisher, 2011). A feeling of trust in a team helps foster an atmosphere of collaboration and interaction, and helps a team to get tasks done more quickly and efficiently. A leader must cultivate open communication and create an atmosphere of sharing ideas, news, doubts, and thoughts. It could be useful to regularly suggest discussion topics as an activity, and allow team members to express their views without retribution. This type of exercise helps people recognize boundaries in communication. The main leadership principle here is to be honest and to demonstrate openness, as "leaders set the example for the rest of the team" (Fisher & Fisher, 2011, p. 82). Some team building exercises that can support trust and open communication include creating and supporting social time, organizing meetings in cafés, and creating virtual cyber cafés for the team.

Conclusion

Due to the complex nature of VMT organizations, leaders should think carefully and strategically about the implications and inherent challenges of such teams. Subsequently, when forming a virtual team, organizations need to plan for the unique training and development needs of these teams. However, deploying unique strategies and team building exercises to address the unique needs of VMTs can improve team performance. Team building exercises take time and planning and can sometimes be overlooked at the expense of meeting project objectives and timelines, but effort up front can improve the chances of

success. Engaged teams lead to greater productivity, lower turnover, better company culture, and increased performance.

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A KISS Guide to Virtual Teams

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Abstract

A KISS Guide to Virtual Teams was created to give managers the tools needed to exploit the advantages of virtual teams while overcoming the challenges that space, time and culture can inflict on them. With the understanding that a positive social environment is essential for a virtual team success, the KISS Guide to Virtual Teams will give managers the tools needed to build and maintain a high performing virtual team. The goal of the authors is to help managers navigate the multifaceted task of successfully leading virtual teams through easy to follow principles that are based on the KISS principles of keep it simple silly. Although leadership in a virtual environment is very complex, the KISS Guide to Virtual Teams will introduce managers to strategies that can assist them in building inner team relationships, understanding the importance of communication, discovering how technologies can support structure and help them better understand the effects that culture can have in achieving their goals.

Keywords: Virtual Teams, social environment, team relationships, team communications

Space-Time and Virtual Teams Team Culture

Team culture is one of the most critical and difficult aspects the virtual team leader has to establish within their team. Challenged by time, space and individual culture, the team leader, must strive to bridge these gaps early in the team's formation to allow for trust to build between members. The building of trust is supported by the definition of team norms, the gaining of team commitment and the tracking of timeliness and quality of each completed task. The KISS Guide to Virtual teams will direct managers towards establishing the new team dynamic in this next section with one aim, to accomplish the primary goal of the team.

Team culture is built on a sense of commonality and belonging. Belonging is established once team members start to become familiar with each other and begin to trust in each other. A culture built on trust in one that is built on frank, open, honesty and is the cornerstone of successful virtual teams. For the virtual team, building trust can be challenging since the team does not have the advantages of face to face and ad-hoc "water cooler" interactions that collocated teams do. The KISS Guide to Virtual Teams will walk you through the process to enable team trust and ultimately success with some indispensable tools the virtual leader can use to create trust and success.

Defining Team Norms. Establishing a team's personality or culture takes a bit of effort on the part of the leader. The KISS Guide to Virtual Teams has simple yet elegant tools that you can use to simplify this process. As we present each tool, we will also give you a good example using our fictional Raydon virtual team.

Develop Operating Guidelines. We have already presented how the team charter establishes the purpose of the team, but there are no defined ground rules for the team to follow yet. This is an essential part of the start-up team, so they understand which member behaviors are acceptable and which are not acceptable. The KISS Guide to Virtual Teams

calls this set of ground rules the Operating Guidelines also known as the OG (Fisher & Fisher, 2011, p. 71). The OG will clarify the acceptable norms for the team, and if executed correctly the OG will override each member's local culture. How do you accomplish this you ask? Simple, you create an agreement among all team members on how they will behave. This agreement will be drafted by the team, facilitated by the virtual leader, and will answer the following questions:

- How will the group practice equality? The answer to this question will define how the team will ensure all members are treated equally, and how each member will be given equivalent opportunity. The team will have to be aware of time zones, language barriers, and local cultural influences (Fisher & Fisher, 2011, p. 71). Equality means all members have a voice and an opinion, which is to be respected.
- How will the group practice respect? The answer to this question will define how the team will dialog with each other. Have a polite, positive tone at all times. Enter each communication with a positive mindset and assumptions of good will and intent on the part of the other members. Personal attacks and angry tone are never acceptable.
- How will the group practice honesty? The answer to this question will define how the
 team commits to raising issues, quickly and without emotion, in either delivering the
 facts or receiving the facts from other members. Members must commit to clear and
 honest disclosure.
- How will the group foster an atmosphere of action? The response to this question addresses several areas that the team must identify and commit to. Areas such as:
 - o Timeliness of communication, which is committing to and adhering to the established communication protocol.
 - Accountability, which is the commitment to complete what they said they
 would complete by the time they said they would finish it, and at the quality
 they promised. Breaking the accountability oath, without informing the team
 ahead of the deadline, is considered very poor form in the eyes of the team.
 - Follow process, which is the commitment always to follow established processes, such as keeping minutes of meetings, or establishing agendas before meetings.
 - Conflict management, which is the commitment to allow conflict to create an atmosphere of positive discussion and never an atmosphere of personal attack.

Example: Team Raydon OG Agreement:

- Honesty is the cornerstone of TRUST, we vow to be honest, true and open in all our dealings with each other, even if that leads to conflict, but we will always be respectful of one another. We will hold each other accountable.
- We agree that each of our teammates has an equal voice and opinion. We will not allow one member to overshadow another. We will hold each other accountable.
- We value and respect each other's personal time; therefore we will rotate the meeting times to accommodate each teammate's local core work hours and personal vacation. We will hold each other accountable.
- We value and respect each other's personal time; therefore we will follow the rules of communication as we have outlined them in our Communication Protocol. We will hold each other accountable.

- We value and respect each other. Therefore we will respond to questions and queries in a timely fashion as we have outlined them in our Communication Protocol. We will hold each other accountable.
- We value and respect each other; therefore we will be true to our commitments, as we have outlined them in our Task Register. We will hold each other accountable.
- Discord is a natural thing, but we vow not to let it get personal. If we have an issue with someone, we will contact the other to resolve, as we have outlined in the Conflict Management Protocol. We will hold each other accountable.
- Team success is capital; we vow to make decisions based on facts to meet our team objectives. We will hold each other accountable.

Establish a Common Language. If the team if very diversified in terms of culture and language, then the KISS virtual leader should consider defining a **glossary of terms** to assist in driving out local cultural vernacular. Professor Watkins of the International Institute for Management Development (IMD.org) (2013) recommends the following; "Take the time to explicitly negotiate an agreement on shared interpretations of important words and phrases, for example, when we say "yes," we mean... and when we say "no" we mean...and post this in the shared workspace (Watkins, 2013)"

Since the Raydon team is comprised of team members from Japan, USA, Germany, India, and China, John our virtual leader should consider defining a glossary of terms. Here is a great example of a very contextual culture, the British, and a very non-contextual culture the Dutch and how each culture interprets common sayings (Beer, 2003).

Example ANGLO-DUTCH TRANSLATION GUIDE

What the British say	What the British mean	What the Dutch understand	
I hear what you say.	l disagree and do not want to discuss it any further.	He accepts my point of view.	
With the greatest respect	I think you are wrong (or a fool).	He is listening to me.	
That's not bad.	That's good or very good.	That's poor or mediocre.	
Quite good.	A bit disappointing.	Quite good.	
Perhaps you would like to think about I would suggest	I his is an order. Do it or be	Think about the idea, but do what you like.	
When appropriate locally	Do what you like	Do it if you can.	
Oh, by the way Incidentally	The primary purpose of our discussion is	This is not very important.	
I was a bit disappointed that It is a pity you	I am most upset and cross.	It doesn't really matter.	
Very interesting.	I don't agree / don't believe you.	They are impressed.	

(Ripmeester, 2005)

Provided as an example, your team will have to define their own glossary of terms ensuring to include any regional or ethnic terms, as well as all critical nomenclature used in their industry. Some cultures are high-context, the meaning of what they say has an

underlying meaning, such as the British and Japanese, whereas other cultures are low-context, the meaning is face value and has no under-meaning, such as Americans, Canadians and Germans (Beer, 2003). Team Raydon may have crosstalk when dealing with Kiomi, Xan and Arjun, whereas France, John and Ingrid will have a more direct dialog. The team leader will have to be vigilant to ensure that the high-context team members do not miss-read their peers and vice versa.

Agree on Team Members Communications Routine. The rhythm by which a team communicates speaks to how structured and disciplined they are. It is up to the team leader to guide the team in establishing the communication protocol. We have already identified the tone by which the team will communicate; now we need to define when and for what purpose they will communicate. This is as important a commitment as any other the team will make. We refer to this as the communication protocol. Team Raydon is very diverse in terms of time, and so they will have to determine the best channels to communicate and the frequency of these communiqués. In many instances, it will be very difficult to get everyone in one-time slot. Therefore the all member teleconference will need to be infrequent.

Team Raydon has elected to only have one all member teleconference or video conference per month, on the third Thursday of every month if possible. This critical meeting will be scheduled around everyone's vacation plans, to ensure everyone is at that meeting. The meeting is estimated to have a duration of 3 to 4 hours, and John will be facilitating the agenda, as well as minutes of meetings. The monthly meeting will have different start times determined by a rotation schedule of core hours for each team member time-zone. The team has also elected to have weekly status updates via email on Fridays, and John the team leader will have one-on-one teleconferences once a week at a minimum with each team member to be scheduled early each week.

The core developer team, of Ingrid, France, Kiomi, and Arjun, have all agreed to setup task management and instant messaging inside the SLACK tool to facilitate rapid application development. They also plan on having quick "after-milestone" review meetings to discuss what went well and what went wrong, and how they will overcome some of those issues. Kiomi has been elected by the core team to manage these review meetings since she is a brilliant architect and very diplomatic. The core team respects her very much. Xan will have access to slack to answer any questions related to standards and will reach out to each member over Skype should he need to clarify best practices with the team members and John will have access to oversee task management on SLACK completing the team's Communication Protocol.

Track Commitments. It goes without saying that the team is there for one reason; that is to say, the team was created to meet its primary goal. Everything that has been presented thus far is in support of that single goal. The high-level goals give the team a purpose, but goals than to be high-level and nebulous.

Decomposing Goals to Tasks. The KISS team leader needs to break down the high-level goals into smaller more The Project Management Body of Knowledge (PMBOK) defines a work breakdown structure as a "hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables (PMI, 2013, p. 126)." This need not be a complicated exercise. In one of the early team meetings, this should be one of the first tasks for the group. In this meeting you as a team will decompose the high-level goals into requirements and timelines. It is

beyond this guidebook to present all methods of doing this exercise so we will present a KISS version of Goal Decomposition here as a kick-starter for the first-time virtual leader.

Let's assume that the team's project already has a set of goals and objectives. This would have been identified by management and would have been the primary reason for the team to exist in the first place. We have combined two simple guides, one from Bowen & Baker (2013), and the other from Task Management Guide dot com (2017) to offer the KISS virtual team leader a simple guide to follow to derive the work breakdown structure.

Step One: Identify Project Deliverables

Outline major or strategic tasks that achieve project goals and objectives at high level (may have been done already before the team was created)
Organize major tasks in logical sequence
Set priorities between the tasks

Link goals of major tasks with each other Identify resources required to perform major tasks

Step Two: Deal with One Deliverable at a Time

Break every task into smaller activities or sub-tasks

Step Three: Deal with Each Deliverable Individually

Allocate necessary resources to sub-tasks

Organize sub-tasks into logical milestones for monitoring completion status

Step Four: Know When to Stop

Develop a task flowchart that shows all levels of project breakdown.

Once the tasks and sub-tasks are defined, overlay these tasks in a task flowchart. An example of a typical task flowchart is the famous Gantt chart. You can use products such as Microsoft Project to build your Gantt chart, but this tool is costly, and not everyone in your team will have access to the output file. We at the KISS guide would recommend simply using Microsoft Excel to achieve the same goal.

Here the KISS virtual team leader would take each task and sub-task from the Work Breakdown Structure, and sequence them in the GANTT chart tool to see the overall timeline to deliver each milestone in the project. The leader can share this file so everyone can see his or her tasks.

Assign Responsibility. The primary method, by which the team will produce a product, will be through each task to various team members. A great KISS tool used to manage team accountability by task is the Responsibility Assignment Matrix. The Responsibility Assignment Matrix (RAM) commonly referred to as the RASCI matrix (Jacka & Keller, 2009, p. 257) is easy to understand and to establish but it can be a bit cumbersome to get going but does provide clarity in roles and responsibilities of each individual on the virtual team (Fisher & Fisher, 2011, p. 70). In addition to using the responsibility assignment matrix, the KISS virtual leader must oversee and guide the team in its effective use. Each letter of the acronym represents the role type assigned to each team member.

As follows: Responsible, Approval, Support Consult, Inform

Examples of a RASCI Accountability Matrix For Team Raydon

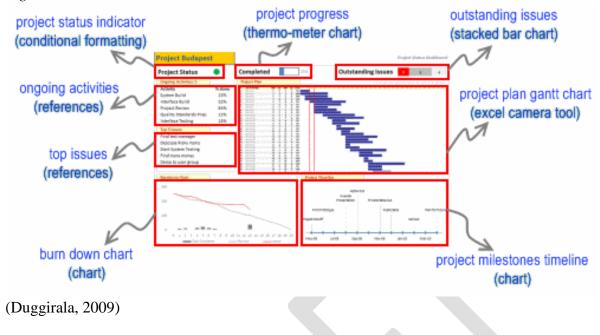
	John	France	Ingrid	Arjun	Kiomi	Xan
Task 1		S	R	S	I	С
Task 2	A	R	S	S	I	С
Task 3	A	S	S	R	I	С
Task 4		S	S	S	R	С

Responsible	This individual is responsible to see the task finished	
Approve	This individual will make the decision if one is needed for the	
	task	
Support	Is there to assist the individual responsible for the task	
Consult	This individual will provide input on the task, but has no	
	authority.	
Inform	This individual is to be informed of progress and completion	

In this example, we have assigned names from our virtual team to each column. In some teams, this could be the title of roles rather than actual people, but in the spirit of keeping it simple silly, we recommend individual names. No ambiguity. In our example, Kiomi has a direct dependence on tasks 1, 2, and 3 for her task 4, so the other team members must keep her informed of progress and issues so she can be prepared when her time comes to complete task 4. Furthermore, Xan in this example is acting as a technical expert in a consultative fashion; he is to be consulted on all tasks to suggest the best practice, it is the responsibly of each R team member to accept Xan's consultation or not in fulfilling their task. France, Ingrid, and Arjun mainly have the same role for each of their tasks, and support each other as a work unit, each responsible for a specific task, while helping the others. It is likely that the three tasks, 1,2,and 3, are being fulfilled in parallel. Task 2 and 3 require expenditures, and so the team leader, John, has to review and approve each expenditure, since he is the project manager accountable for overall project budgets.

Deliverables Dashboard. It will be up to each team member to hold her/his teammates accountable for delivering team member task assignments as well as to give the entire time focus on areas that need to be addressed. The KISS Guide to Virtual Teams recommends that the Deliverables Dashboard be a simple webpage that the team can have as their landing page. The page itself need not be complex from the standpoint of automatically being connected to each section. The layout in fig 1 are just images from our other source documents copied and organized for the team to see. The team leader will be responsible for keeping this page up to date on a weekly basis. From this dashboard, the entire team can appreciate where the project is at and can stay focused on delivering their portion of the project.

Fig 1. Deliverable Dashboard.



Conclusion

A KISS Guide to Virtual Teams was created to give managers the tools needed to exploit the advantages of virtual teams while overcoming the challenges that space, time and culture can inflict on them. The guide provides managers the tools needed to successfully lead virtual teams through easy to follow principles that are based on the KISS principles of keep it simple silly. Though out the KISS Guide to Virtual Teams there are fifteen smart thoughts as part of the key sections within Space-Time & Team Culture that will introduce managers to strategies that can assist them in building inner team relationships, understanding the importance of communication, discovering how technologies can support structure and help them better understand the effects that culture can have in achieving their goals.

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On Liquidity

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Abstract

The paper discusses the overlooked, but important, aspects of the firm's liquidity. We identify liquidity as one of the more commonly detailed financial ratio categories. However, despite it's ubiquity, liquidity is often mistreated with excess emphasis placed upon the current ratio. Instead, we argue that it is the cash position of the firm and the speed of the firm's cash conversion cycle which matters most. Understanding the cash conversion cycle and the necessary cash position of the firm opens the doors to an entire array of scholarship on firm performance. We begin this pathway with four propositions.

Strategy scholars have long relied on financial ratios as a mechanism for business scholarship. As researchers, we focus on the determinants of performance of firms, relying on various ratios to serve as the indicators of performance while other ratios stand in as determinants or controls. As educators, we teach both the calculation and interpretation of financial ratios.

One of the most ubiquitous of these ratios is the current ratio, comparing the most liquid of assets to the most current financial obligations of the firm. It is with good reason that we consider this ratio. While liquidity itself is not a driver of performance, the absence of liquidity is well-established as a predictor of firm failure. Firms who lack basic levels of liquidity are far more likely to fail (numerous cites) and undercapitalization, which would include the lack of liquid assets with which to operate, is a well-understood cause of startup failure (more numerous cites).

While it is very well established that some minimal necessary threshold for liquidity exists, logically a firm could also have too much liquidity. When we consider the three current assets which comprise the largest share of current assets, cash, inventory, and accounts receivable, it is easily understandable why too much may, in fact be problematic. Too much inventory can reflect a firm's inability to sell its goods (cites), high balances in accounts receivable can suggest poor credit practices and an inability to collect on sales (cites), and too much cash can indicate a lack of suitable high-return internal projects to pursue (cites).

Despite this, research on liquidity rarely examines an boundary for efficient liquidity. Indeed, scholarship on slack resources, generally measured using these same current assets, seems divided on whether high levels of liquidity portend good, or poor, future performance. One line of scholarship considers slack resources as a predominantly beneficial, representing a pooling of resources prior to positive strategic action. Other scholars consider slack resources as a sign of managerial excess, where the pooling of funds typically leads to actions which benefit executives at the expense of shareholders. A meta-analysis (cite) on slack resources failed to resolve this debate, finding mixed relationships between slack and performance. Clearly, we need a better framework for thinking about liquidity.

We believe that there is a fundamental problem with the way we consider liquidity and, by extension, slack resources. Specifically, liquidity needs are not industry specific, they are business model specific. The business model of a firm, that is the manner in which the firm's connections to upstream suppliers and downstream customers is leveraged by the firm to generate profits, necessitates more or less liquid asset needs. Some business models will require higher levels of liquidity to operate, some can operate with minimal liquidity, while others still will need middling levels of liquidity to sustain operations. From this, we argue that the question of slack or insufficient liquid resources must follow an examination of the business model of the firm.

The purpose of this paper is to develop and elaborate upon the linkages between business model and liquidity. We begin with an exploration of the business model of the firm and connect this to generic strategic positioning theories. From this, we discuss the cash conversion cycle of the firm and link it to the business model. Following that, we consider the manner in which the cash conversion cycle itself dictates the liquidity needs of the firm. It is upon this that we establish our theory of liquidity and we discuss the analytic, research, and teaching implications of this theory.

The value capture of business models

Our discussion of business models is built upon that of Chesbrough and Rosenbloom (2002, pg. 533) which "describes the value proposition for customers, the targeted customer segment, how the offering will be produced and delivered, and expected costs and profit." Taken in this way, the business model normatively aligns with the firm's strategies (Priem, Butler & Li, 2013) in a manner consistent with configurational scholarship on strategy (Hambrick, 2003).

Configurational research has long recognized that multiple, effective recipes for success work within a given industry (Grimmer, Miles, Byrom, and Grimmer, 2017). From a configurational perspective, a firm's success in executing its strategy is contingent upon its ability to align, or find fit, between the various parts of its strategy and its business model (Zott and Amit, 2007). Further, the specific choices of the firm as it executes its strategy are likely to align with its configurational type (Maniora, 2018).

Zott and Amit (2008, pg. 4) consider the business model to be "characterized by their design themes, which capture the common threads that orchestrate and connect the focal firm's transactions to external parties. This might, for instance, be exemplified by a software firm changing its revenue model from software as a good (selling individual units) to software as a service (subscription model) or freemium software (giving away the software and generating revenue from advertising or microtransactions). Their idea connects with configurationalists in that it focuses on "the holistic gestalt of a firm's business model" (Zott and Amit, 2008; pg. 4).

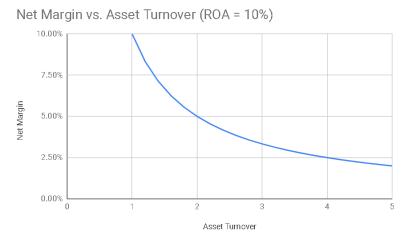
While we acknowledge the important of considering the manners in which the firm connects with its external stakeholders, we are primarily here focused on the manners in which those connections create both costs and revenues. This remains consistent with Zott and Amit (2008) in that they consider value capture for a business model represents the appropriation of revenues less costs throughout the connections to external stakeholders. Since it is the fit between the design elements of the firm's strategy that determines the efficacy of the strategy (Siggelkow, 2001), we believe it is critical to consider the fit between the value capture mechanism of the business model and the business model itself.

In this manner, we see the value capture component of the business model as consistent with the economic logic of the firm (Hambrick and Fredrickson, 2001). Economic logic inquires as to the manner in which the firm expects to generate returns appropriate to its cost of capital, or stated another way, how will the firm use its pricing decisions to accumulate profits? It therefore follows that it is the fitting of the economic logic (as a mechanism for value capture) to the business model and the firm's generic strategies (Porter, 1985) that matters. It is here, in profit accumulation, that we connect the value capture of the business model to firm performance. Some firm's will do a better job of leveraging their assets to generate profits than will their competitors. It is here that the scholarship on business models joins the strategy tradition of researching firm performance.

The Return on Assets (ROA) and various manipulations of ROA (typically trends in, or changes to) are commonly used firm performance measures. From that DuPont Analysis, stage one, allows us to disaggregate ROA into its drivers of profit, specifically Asset Turnover (ATO) and Net Margin (NM). Research has demonstrated that the specific levels of ATO and NM are not crucial predictors of future profitability, but that changes in ATO and NM specifically prove useful in predicting changes in profitability (Bauman, 2014).

From a configurational perspective, it should not be surprising that ATO and NM themselves are not specifically useful in predicting firm performance. Indeed, the primary implication of DuPont phase one is that ATO and NM represent direct strategic trade offs. In determining its economic logic and resulting financial targets, the firm strikes a balance between volume of business (Asset Turnover) and profits per transaction (Net Margin).

A visualization of this trade-off appears in Figure 1 below. In this figure, asset turnover is depicted on the horizontal axis and net margin is depicted along the vertical axis. The plot provided indicates all combinations of ATO and NM that would produce an ROA of 10%. Any change in ATO for a focal firm, that coincides with a direct off-setting change in NM, would still leave the focal firm at the same point in ROA.



But beyond this, the regions along the curve in figure one might also be thought of as the visual location of several specific business models. Areas to the lower right would represent higher volume firms; firms whose profitability is driven by generating many sales, even though the profit on each sale is relatively low. Areas to the upper left would represent higher

margin firms; firms who sell very few goods but who generate a substantive profit on each good sold. In the middle, would represent firms executing a blended model striking a balance between selling more goods than a margin firm, but making more per sale than a volume firm.

Configurational research and theory would lead us to expect that the firms in each of these regions would be similar to those occupying their region, but likely quite different than their competitors who occupy other regions. Specifically, we would expect the configuration of the strategy-business model for the volume firms to look similar to each other, but quite different than that of the margin firms or the blended firms.

There is more to this than just a thought experiment. It is not uncommon to find many participants in an industry sharing a similar level of profitability (ROA). It is definitely the case that some firms outperform, and possibly routinely outperform this norm. It is also the case that other firms underperform, again possibly routinely, this profit norm. But the normative state, the "typical profitability" of an industry exists and we would expect to find the firms occupying this typical profitability sector to themselves differ in their business model positioning.

The Cash Conversion Cycle

The business model of the firm, coupled with the product/market strategies of the firm necessitate a business unit design befitting these strategies (Chandler, 1962). It follows that the manner in which the firms various operating units function will itself reflect these design choices. One of the more important, but often overlooked, ways this manifests is in the cash conversion cycle of the firm

The cash conversion cycle represents the speed and pattern with which the firm converts its short term assets and liabilities into cash. A cash conversion cycle considers the waiting time for cash to inflow as the sum of the days inventory outstanding (DIO) and days sales outstanding (DSO) less the time delay in paying out vendors (DPO). Some firms will generate cash inflows quickly (a short DIO+DSO) while other firms will take longer to produce cash inflows. Some firms will pay cash out quickly (a short DPO) while others, either through bargaining power with suppliers or through lack of ability to pay, will pay vendors much more slowly.

	Fast firms typically(and/or)	Slow firms typically(and/or)
Inflows (DIO+DSO)	Maintain high efficiency inventory models, Price their good for high volume sales, Do not extend customer credit, Outsource (factor) their collections, Offer generous discounts for fast payments	Carry high-price, slow moving inventory, Maintain a broader array of inventory, Offer customers generous credit terms, Make proportionally higher credit sales
Outflows (DPO)	Are unable to receive vendor credit, Frequently make use of fast-pay discounts, Reorder inventory very quickly	Are cash-starved (must wait to pay), Command generous payment terms from vendors, Rarely utilize vendor fast-pay discounts

We posit that a profitable firm's cash conversion cycle is neither accidental, nor random. Rather, it is the specific outcome of the firm's choice of product/market strategy and business model. To exemplify our discussion of cash conversion patterns, Table 2 provides examples of the retail firms Bed Bath & Beyond, Nordstrom's, Wal-Mart, alongside of the online retailer Amazon. Wal-Mart differs from Bed Bath & Beyond and Nordstrom's by virtue of their product/market positioning; the former a cost-leader and just-in-time inventory firm while the latter two are differentiated through superior offerings. The three pure retailers differ from Amazon by business model with the three retailers providing goods largely through a Brick and Mortar approach, by contrast, has a radically different business model both through its primary online sales and delivery, but also through its vendor approach which blends traditional retailing, consignment (Fulfilled by Amazon), and marketplace (Selling on Amazon).

We can see different configurations of cash conversion across these firms. Walmart has a much more rapid cash conversion (about 6 days) than its two retail competitors (about 75 days and 27 days). While this is a result of its far more rapid inventory model (43 days as compared to about 130 days or 75 days), Walmart is also a bit more rapid in paying its vendors (42 days to 52 days). These differences are each logical fits with the difference between a volume based, efficiency seller and two slower-inventory margin sellers. But we also see that the business model itself changes the conversion process with Amazon having the shortest cash conversion process (-34 days) resulting from its reasonably fast inventory movement (50 days) but also from its relatively glacial payables (105 days).

2017 2016 2015	Bed Bath Beyond BBBY	Nordstrom's JWN	WM	Amazon AMZN
ROA	6.0%	5.4%	5.2%	2.3%
	10.0%	4.5%	7.2%	2.8%
	13.0%	7.8%	7.6%	0.9%
DIO	126.1	74.8	42.8	52.3
	138.8	72.1	43.5	47.4
	138.9	76.1	45.0	52.2
DSO	0.0	3.4	4.1	27.0
	0.0	4.9	4.4	22.4
	0.0	5.0	4.3	19.3
DPO	55.3	52.0	45.1	112.9
	56.3	51.0	41.9	104.7
	53.7	51.8	38.9	103.9
CCC	70.8	26.2	1.8	-33.5
	82.5	26.1	6.0	-34.8
	85.2	29.2	10.3	-32.4

We also point out that these conversion numbers are relatively stable year to year and that this stability is maintained during shifts in their overall performance as measured by ROA. This

suggests that the cash conversion processes are not inherently dependent upon the performance of the firm, but rather on the design choices resulting from the firm's strategy. Cash conversion cycle is, therefore, a candidate variable of interest for understanding the ways in which firms differ and thus by extension potential determinants of performance.

Despite this, we find scant usage of cash conversion cycle in strategy research. Text searches of the term "cash conversion cycle" in the title, abstract, and full text for some of our field's top journals (SMJ, AMR, AMJ, ASQ, and JOM) finds no usage in this century. While we did not find usage of cash conversion cycles in our top strategy journals, we were able to identify that at least some studies of cash conversion and firm profitability exist (Knauer and Wohrmann, 2013).

Knauer and Wohrmann (2013) principle finding is that relationships between cash conversion cycle and profitability (usually ROA) are mixed with some results positively related to performance and the same result negatively related in a differing study. However, they identify that CCC is often used as a single metric and not in its disaggregated form (inflows and outflows). They also observe that the problem with such studies is that they fail to consider non-linear relationships between these components. We suggest that the business model 2x2 combination of fast/slow inflow/outflow is as likely a culprit as nonlinear relations.

We believe both the omission and the understudy of cash conversion cycles constitutes a problem within the literature on firm performance. To the extent that the operating models of the firm extend from the product/market strategy and business model of the firm, the speed of cash conversion will greatly differ between competitors within a given industry. We believe that such differences influence the necessary amount of cash on-hand in order to be liquid. Further, we suggest that the nature of cash conversion and its relationship to both liquidity and firm performance is contingent and thus neither necessarily linear or curvilinear. As we shall demonstrate, thinking of liquidity with a contingency framework given cash conversion dramatically changes our assumptions about the minimum liquidity needs of the firm. Further, such a contingent framework would shed insight towards the level of current reserves that are necessary for operation and also the level at which such reserves truly become slack.

A contingent framework for liquidity

Strategy scholarship has long included liquidity as one of the several categories of firm financial ratios. In general, liquidity refers to the firm's ability to meet its most immediate financial obligations through the deployment of its assets most easily converted to cash. Liquidity is generally considered a prerequisite to, but not a direct antecedent, of firm performance. Firm's, be they large or small, long-established or start-up, who lack appropriate liquidity are more likely to fail.

Textbooks of strategy and general management often include sections on financial statement analysis. Prominent in such sections is a section on liquidity and the current ratio is the overwhelming ratio recommended for liquidity analysis. Beyond calculation of the ratio, though, limited guidance is typically offered on the analysis of the liquidity ratio. To such extent as guidance is provided it is often based on a "rule of thumb," which states that the current assets should outnumber current liabilities by a 2:1 margin. This, so-called, "rule of thumb" also pervades general Internet literature on the current ratio, where a 2:1 advisory is commonplace.

The problem with this guidance is that it seems to describe a statement that profitable, large firms regularly ignore. Table 3 lists the current ratios for 2015 to 2017 for the retailers we used as examples in our discussion of the cash conversion cycle. Only one of the four firms, Bed Bath and Beyond approximates the "rule of thumb" and only for one of the three years we list. The remainder stay closer to a 1.0 and Walmart operates at a ratio below 1.0. Indeed in the nearly decade that these authors have tracked Walmart, the company rarely even approaches an upper-bound of a 1.0 current ratio. Yet, each of these companies have performed profitably over this same period.

Company	2017	2016	2015
Amazon	1.0	1.0	1.1
Bed Bath Beyond	1.8	1.8	2.0
Nordstroms	1.1	1.1	1.0
Walmart	.8	.9	.9

Lest this be considered an aberration of retailers, we should point out that you can find similar examples of low current ratios for profitable firms in technology stocks (Apple ~1.2), automotive manufacturing (Toyota ~1.0), banking (Citigroup ~.50), entertainment (Disney, ~.9), oil (Exxon, ~.80), and pharmaceuticals (Pfizer, ~1.35). We are also not suggesting that firms have simply evolved past the, so-called, rule of thumb and that a new, lower rule should take its place. In most of these same industries, we observe examples of profitable firms who do run at, near, and occasionally even slightly above the 2.0 current ratio mark.

We argue, instead, that the rule of thumb is both wrong in that it fails to describe reality, but that it is also misguided. It places its emphasis on a ratio between current assets and liabilities that fails to take into account the ways firms might choose to use those same assets and liabilities. Our point is that the business model of the firm is essential in understanding the linkages a firm has to its upstream suppliers and downstream customers. Without taking into account predictable variations in the business model, we miss both the reality of firm performance, but also the ability to offer advice which mirrors practice of successful businesses.

Another thought experiment, involving changes to the inventory and payables balances as a firm's business model changes offers clarity on our concerns. The current ratio, as the preferred measure of firm liquidity is misguided in that it is heavily affected by both inventory and accounts payable, each of which are outcomes of a firm's business model. With accounts payable, the terms available from vendors largely influence the speed - and thereby - the proportional balances for vendor payables.

Indeed, it is common treasury wisdom that a firm with 2/10 net 30 payable terms should only make payments on the 10th or 30th day of its billing cycle. Firms who have significant buying power over their suppliers may carry even more favorable payables terms which further slows down their need to pay. The result of such favorable positions would be a proportionally larger AP than other competitors. Similarly, startup firms and many small

businesses struggle to reach a point where trade credit is available. Most startup firms operate, at least for some time, on a cash-basis with payment due on order or on receipt of order. For such firms, this results in a proportionally smaller payables balance.

However, the current ratio implications of the two cases lend themselves to interpretations in opposition of reality. The powerful firm able to pay its vendors slower will see a slight erosion in its current ratio, suggesting an inability to pay, when the reality is that it is able to use its suppliers as a working capital credit line. The new firm, operating on a cash basis, will see a ballooning current ratio since its payable balances will approach a zero lower-bound. This, in turn, implies the firm's liquidity is powerfully high, when in fact the hypothetical startup is more, not less, reliant on cash balances!

The same is, similarly, true regarding the effect of inventory on the current asset side. A firm operating with an efficiency driven business model (Zott et al., 2011) is quite likely to adopt a "just in time" (JIT) inventory system (CITE). The result of JIT is a gradual lessening of its inventory balances as the firm finds ways to gradually reduce slack in its production system. By contrast, a firm facing problems moving its inventory is going to see a gradual increase in proportional inventory balances as inventory accumulates even past the point where the payables on its raw materials have been paid.

Again, in both of these cases, the implications of a current ratio analysis will be in direct opposition to the reality of the firm's position. The efficiency-driven, JIT firm will see gradual erosion in its current ratio, suggesting a problem with ability to pay. In fact, this firm is actually going to find it easier to meet its payable needs due to the reduction in its days inventory outstanding, the firm's cash conversion cycle will lower, leading to the ability to self-fund from its own operating cycle. In the latter case, the firm who fails to move its inventory will have successfully larger current ratios implying a strong, liquid position. In fact, the opposite is again true. Since the inventory isn't converting to cash, but payables remain due, the firm is increasingly reliant on its cash balances to maintain liquidity in its operating cycle.

Both the speed or slowness of payables movement and the speed or slowness of inventory movement affect the outcome of the current ratio. Certainly when the proportional differences between current assets and liabilities is the outcome of a failed (or failing) business model, changes in a firm's current ratio may indicate signs of future problems. But it is also likely, as we have demonstrated in our above thought experiment, that negative looking changes in the current ratio of a firm may in fact reflect positive performances consistent with that firms business model.

This brings us to our first proposition. We believe that the current ratio is an inappropriate measure of liquidity as it relies on both the inventory, accounts receivables, and accounts payables balances in its determination. While it is generally true that the operating assets of the firm will be used to pay the operating liabilities, it is the speed of conversion, not the balances that matters in determining sufficiency. An arbitrary rule of thumb which requires simply twice the current assets as liabilities fails to take into account the rate at which each is converted to cash, meaning that the resulting "healthy" liquidity level might overstate or understate the liquidity of the firm given its failure to consider the business model of the firm. To that end, we suggest net cash conversion cycle as a better proxy for the rule of thumb liquidity needs of the firm.

Proposition #1 - The liquidity needs of the firm are affected by the business model of the firm, such that the firm needs cash on-hand to cover the differences in the speed of its cash inflows (DIO + DSO) with its cash outflows (DPO)

Correlate (P1) - The cash balance needs of healthy firms will roughly equate to its daily sales times its net CCC

Focusing purely on the net cash conversion cycle is helpful for a cursory examination of the firm's liquidity needs. But there are a number of factors, both unique to the firm itself and common to its dominant industry, which likely affect the firm's liquidity needs. To this end, we suggest scholarship study the cash balances of the firm as an outcome of such factors and that the result of this scholarship should then be used as an indicator of liquidity, slack, or undercapitalization. Because of this, we suggest a research program focusing on understanding the appropriate, or perhaps reasonable, cash allocation of a firm and that simply using the current ratio is not efficient for this task. Because resources are scarce, the choices a firm makes and the outcomes it can not control for its cash asset allocation as well as the efficacy of those choices and outcomes play an important role in understanding the performance of firms.

We are not certain, at this state in our research, of the best method of estimating a firm's appropriate cash allocation. But we believe we have identified some candidates for inclusion in the directional flow of the cash conversion cycle and we shall now consider other candidates. We know that startup firms often need additional cash to survive their scaling up period and that firms experiencing growth may need cash in addition to that needed to cover routine operating expenses. It is quite likely that some industries are more cash intense than others. This brings us to our second proposition.

Proposition 2: A recommended cash allocation for each firm exists and its precise value is predicated by factors both internal and external to the firm.

We believe that the right way to determine this recommended cash allocation is to perform a study, within industry, on healthy firms. In this case, healthy firms are those who are currently performing at or near the typical profit level for the industry. Firms who are underperforming the industry and even possibly firms outperforming the industry might, for differing reasons, maintain cash reserves below or above the recommended level.

For underperforming firms, the inability to generate typical profitability is itself likely hindering the ability to generate cash. Cash for the present year is likely lower as a result of underperformance in the most recent year. Conversely, firms who are more profitable than typical may choose to accumulate cash, resulting in a larger than typical asset allocation. In either case, the deviation of cash as a percentage of assets from the recommended cash asset allocation is an expected consequence of past firm performance. This leads us to our third proposition.

Proposition 3: Deviations from the recommended cash allocation for a firm are the consequence of past performance of the firm and can be explained through an array of internal and external factors.

Giddens structuration theory posits that events can be both simultaneously causes and effects. Specifically when examining agency and structure, structural forces are causes of agency, but agency itself is a causal force on future structures. We believe that the recommended cash position and the actions of firms are simultaneously causes and effects of one another. As we argue above, the deviations from recommended cash allocations are themselves outcomes of the firms most recent performance. But we also see that these same deviations from recommended cash allocations are themselves an impetus to future actions. In this regards, we see the recommended cash allocation as an equilibrium force.

Firms who are operating below profit expectations will typically attempt to reach established industry profit norms. This is even more so for firms who are presently posting losses. In particular, this will often revolve around strategies to improve the firm's cash flow. For firms who are in a turnaround mode, the immediate strategy generally involves eliminating the aspects of the firm most heavily contributing to a negative cash flow. Once the firm has ceased bleeding cash, options to improve profitability follow.

By contrast, firms who have performed exceptionally well in the most recent year will generally find themselves awash with cash. It is not advisable for firms to maintain high cash balances, though, so these firms will of necessity engage in cash draining activities in the subsequent year. While this might entail payouts to shareholders, buyback of stock, or retirement of debt, it is also likely that the firms will choose growth strategies which drain the present cash excess. Evidence on the successes of such activities suggests that firms are only moderately successful in choices of expanding these slack resources.

Proposition 4: Deviations from the recommended cash allocation for a firm are predictors of future performance of the firm with firms consistently seeking to restore the firm's cash allocation to an equilibrium state.

Correlate (P4): The reasons why a firm's cash allocation deviates from its recommended level are themselves predictors of the direction of the firm's future performance

Discussion, Implications, and Limitations

We believe that the liquidity of the firm, and specifically the allocation of cash, is a critical and understudied aspect of the firm's condition. Specifically, we see the cash allocation of the firm as an important intermediary for the understanding of firm performance in that cash is both the antecedent and consequence of the performance of the firm. To this end, we have advanced four propositions for scholarly consideration.

The cash allocation of the firm, relative to its necessary level, is a key indicator of future performance. Firms who operate below necessary cash levels are likely to underperform, fail, or end operation as an independent unit. Firms who have temporarily (or perhaps recently) accumulated cash beyond their necessary levels are likely to expend this windfall for growth, changes to capital structure, or satisfaction of current investors. Firms who regularly carry more cash than is needed are likely to underperform those managed by more disciplined managerial teams. These assertions are consistent with past research on liquidity and slack, but we believe that a more fine-grained measure of liquidity enables a more precise examination of these important performance outcomes.

It is also the case that the cash allocation of the firm, and particularly changes in these allocations, is an important consequence of firm performance. Firms who unusually well, or poorly, will see an offsetting change in their cash position. Firms who adjust their business model, or lose control of their business model, will see offsetting changes in their cash position. Firms raising, or expanding capital, for expansion will see these movements mediated through their cash position. In this way the current allocation of cash, as well as the changes in cash allocations, represents a consequence worthy of examining and the various predictive sources have implications for future performance of the firm.

In one sense, our propositions should are reasonably intuitive and non-controversial. Cash flow and the management of cash flow are fairly straight forward concepts and they are ones considered substantially important when financial institutions evaluate the viability and creditworthiness of business partners. But, we also note that at present scholarship essentially ignores, or oversimplifies, cash flow in considering antecedents and consequences of firm performance. Ignoring and oversimplifying cash flow has, at the very least, led to textbooks which advocate a current ratio benchmark which overstates the liquidity needs of some of our most successful businesses.

Our point here is that research on firm performance needs increased utilization and granularity of focus on the firm's cash cycles. We see this manifesting as both an examination of the firm's liquidity and cash allocation, but also as an intermediary variable in traditional studies of firm performance. We believe that using the approaches to liquidity we suggest offers useful guidance to the study of business models, slack resources, financial analysis, entrepreneurial activity, and small business research.

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Financial Reporting by Small Privately-held Corporations: Exploring Stakeholder Rights to Accountability in the US and the UK

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Abstract

This paper compares the US and UK financial reporting frameworks for small privately-held limited liability companies to explore stakeholder accountability. While public accountability is controversial in the US, the view in the UK is that the price of limited liability is the publication of accounts. In terms of stockholder accountability, the UK Companies Act 2006 requires all limited liability entities to prepare financial statements for members. US private company reporting requirements are governed by State legislation, and as no research has ever comprehensively reviewed these, this paper contributes to the literature by assessing them against nine key accounting metrics. In contrast to the UK, no US State requires public filing, with 27% even lacking a requirement for private corporations to produce periodic financial statements for owners. The study has important implications for stakeholders of US private companies, and highlights issues with present accounting arrangements.

Keywords: Financial Reporting, Accounting, Stakeholders, Accountability

Robust resilience measurement of SMEs in vulnerable contexts using evidence from Ethiopia

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Abstract

Although academic interest has steadily grown on business resilience in recent years, a robust scale to measure the resilience of Small and Medium Enterprises (SMEs) largely remained a "black box". A robust resilience scale is a prerequisite to generate reliable information on how to foster sustainable SMEs. The scale to measure resilience is tested in resilience-challenging environments constituted by SMEs and the so-called Persistently Disruptive and Vulnerable Business Environments (PDVBE's). PDVBE's stand for a continuous threat of disruptions such as seen in many developing countries (DCs) and SMEs represent an economically vulnerable group of companies to cope with such an environment. This kind of environment is a phenomenon of most SMEs in DCs under-researched. By positioning this resilience research in the of Ethiopia challenging environment we fill the gaps in the resilience context literature, but as well learn fundamentally about the essence of the concept of resilience as well. Resilience, in the SME context, has been linked to the firm capabilities to maintain positive performance (growth), adaptability and seizing business opportunities in the midst of tough situations. The study used a survey of 408 SMEs ownerentrepreneurs in Ethiopia to validate these dimensions. A confirmatory factor analysis (CFA) and invariance test (such as across genders of entrepreneurs), were deployed. Results indicate that the construct in SME context is in practice multidimensional, comprising the three already mentioned dimensions. We also confirmed the equivalence of the scale developed across the gender of entrepreneurs. Researchers and organizations that aim to support SMEs can use the scale to evaluate the resilience of SMEs in the vulnerable contexts.

Keywords: Robust resilience measure, SMEs, vulnerable setting, developing countries

Introduction

Appreciating the growing importance of SMEs especially in developing countries (DCs), the lack of an instrument measuring their resilience hinders the progress of empirical analysis of resilience in a context (Korber and McNaughton 2017). Linnenluecke (2017) and Bhamra et al. (2011a), called for the development of a robust resilience measurement for companies. The literature lacks consensus on resilience definitions and measurement (Williams and Vorley 2017) let alone on the robustness of resilience measurement. Insights from the academia regarding SMEs resilience generally remain more of theoretical nature and are mainly methodologically limited to case-based studies (Kantur and Say 2015). Although a few studies have attempted to develop organizations related resilience measures (McManus et al. 2007, Pettit et al. 2013, Somers 2009a), these attempts are exploratory in nature, and most of them are related to large companies. According to Williams and Vorley (2017), developing the robust resilience measure in an SME context is requisite as it guides researchers to generate reliable insights. Robustness of measurement means validating and testing the instrument equivalence (invariance) when developing the scale (see in Nam et al. 2016). The issue of invariance is concerned with the fundamental question of comparability of a scale within groups as used in different researches (Wach et al. 2016). If researchers investigate resilience and (implicitly) draw a conclusion between the resilience of companies in different circumstances, the assumption is that resilience is equivalently measured. If not equivalently measured, the conclusions on the resilience of companies can be the result of the characteristics of the different scales used (Nam et al. 2016, Wach et al. 2016).

Establishing a robust and invariance measure starts by defining the concept (El-Adly and Eid 2017). For example, in their work Ates and Bititci (2011) defined resilience as SMEs ability to survive, adapt and grow in turbulent situations. Williams et al. (2013) contended that resilience is an incipient concept in entrepreneurship, which has been employed to measure firm performance and responsiveness to exogenous shocks, such as financial crisis and recession. Others have understood the resilience concept as not only the capability to minimize vulnerabilities but also the ability to develop new capabilities including seizing business opportunities to ensure business continuities within turbulent situations (Biggs et al. 2015). Research done by Pettit et al. (2013) indicates that resilience rises when capabilities improve and vulnerabilities decrease. Similarly, Biggs et al. (2012a) note that resilience, capability, and vulnerability are interrelated terms. Chu (2015), summarized characteristics such as flexibility, responsiveness, and anticipatory terms into resilience capabilities. Similarly, Markman and Venzin (2014) described resilience as 'firm capability which addresses diverse managerial constructs including performance (see in, PP: 1)'. Expanding this line of reasoning Manfield and Newey (2015) suggested that in entrepreneurship the term resilience holds a portfolio of capabilities. Following this suggestion and a comprehensive review of resilience literature in an SME context (see in chapter 2, pp: 10), we defined resilience in this study as the capability of SMEs to adopt, grow in performance, and seize business opportunities. Hence, resilience is a multidimensional construct and these three capabilities together comprehensively defined the construct in the midst of highly disruptive conditions.

It is also worth noting developing robust measures requires contextualizing the concept across different contexts and the nature of disruptions. Non-farm SMEs in DCs are characterized by the highest failure rate (Ayyagari et al. 2011) due to a complex and chaotic environment. This kind of business environment, in the present study, is termed as persistently disruptive and vulnerable business environments (PDVBEs). The PDVBEs denote continuity and multi-facetted nature of disruptions and vulnerabilities of companies. The more and multiple the disruptions, the more resilience is required (Tengeh 2016). Contrarily to this, past research on resilience and its measurement has highlighted discrete (natural disaster) types of disruptions such as the 2008 Hurricanes Katrina and the 2008/09 global financial crisis, as observed by Corey and Deitch (2011), and Pal et al. (2014). To trigger research on resilience in these way disruptions need to occur. That is why authors (e.g., Kantur and Say 2015, Linnenluecke 2017) questioned the applicability of the resilience scale developed in relation to discrete types of disruption when used to another context such as in DCs context. If we take seriously the idea that understanding firm's resilience and its measurement is contextual (Xiao and Cao 2017), then it is crucial to better understand what dimensions are applicable to measure the resilience of SMEs in highly vulnerable setting such as seen in DCs.

In this study, we contribute to the SMEs literature by operationalizing and validating the three dimensions, including adaptability, growth and seizing business opportunities as measures of resilience for this thesis. The details on the development of measurement items, substantive validity test, and exploratory and confirmatory factor analysis are provided in the methodology section. To the best of our knowledge (see saad et al., 2018, pp. 12), this research is the first to respond to the call for a robust resilience scale in SMEs context especially to PDVBEs such as in Ethiopia. In choosing SMEs in Ethiopia, we assume to gain fundamental insight into the foundation and development of resilience theory. As we already stated, literature

thus far provided less attention to how SMEs overcome disruptive situations in such a setting. Even though no study was done in Ethiopia, the study made in Sudan by Branzei and Abdelnour (2010) has found SMEs which operate in a highly vulnerable business setting require to be more resilient to continue their businesses (Tengeh 2016). By developing a robust resilience measure in such a demanding context, this study makes several methodological contributions. First, the study gives insight into how multi-dimensionality of the resilience specifically in the SMEs context acts as the bases for measuring resilience. Second, testing invariance of the measurement is important across entrepreneurs' gender groups because a lack of invariance may bias empirical results and lead to improper theoretical inferences (El-Adly and Eid 2017). This is a fundamental concern when making group comparisons. Hence, this study tested a potential measure invariance across gender of SME owner-entrepreneurs.

The rest of this chapter is structured as follows. In section 2, we provided a review of the existing literature and proceeded with the discussion about the contextual difference in resilience and its measurements understanding. Section 3 presents the research methodology. In section 4, we address results and analysis, followed by discussion, implications, and limitations of the research in section 5. Finally, we put forward the conclusions of the chapter in section 6.

Literature Review

Resilience in theory: Multi-dimensional

Resilience is a multi-dimensional concept in an SME context. The concept comprises various characteristics or features describing how companies behave and respond to disruptive circumstances. This agrees with Linnenluecke (2017) review covering the resilience literature in a wider business and management streams. However, the complication is that different researchers have identified different characteristics and adopted different conceptualizations for the same notion (Korber and McNaughton 2017). This is mainly due to a fragmented array of definitions of the concept in the literature (Kamalahmadi and Parast 2016b). Beyond disjointed definitions of the concept, the divergence of the disruptions by intensity and frequency is also an issue of a lack of common understanding (Annarelli and Nonino 2016a, Kamalahmadi and Parast 2016a, Sullivan-Taylor and Branicki 2011). That is, how to operationalize resilience theory has lagged behind theoretical developments owing to inconsistencies in definitions. According to Salisu and Hashim (2017), as "contentious as the definitions of resilience (are), generally, there has been agreement among scholars that the resilience differs among disciplines and context (places, company's size, the nature of the threats/events; see PP: 24)". They noted, therefore, until these issues have been addressed, the resilience concept and its measurement continue to be vague in literature.

In business and organization literature, there are attempts to label the construct with different dimensions. Most of them draw dimensions from the system, psychology-employee resilience, socioecology, community crisis or disaster management literature (Kantur and Say 2015) to organizations level(see detail in Table 1). Considering system viewpoint, Tierney (2003) dimensionalized the construct using robustness, redundancy, resourcefulness, and rapidity dimensions. Somers (2009a) adopted the items used from a psychology point of view by (Mallak 1998), i.e., goal-directed, solution seeking, avoidance, critical understanding, role dependence, and access to resources to develop organizations resilience measuring construct based on the opinion of 128 nursing organization managers. Kantur and Say (2015) developed a three-dimension structure of organizational resilience: robustness, agility, and integrity. In a strategic viewpoint, McManus et al. (2008) think that a resilient organization should need situational awareness, management of keystone vulnerabilities and adaptive capacity to natural

hazards. According to Linnenluecke (2017) reviews, however, these dimensions have put much emphasis on developed countries, large companies, and event-driven disruptions. They also import literature and items measuring organizations resilience from other disciplines without contextualizing to entrepreneurship field. The implication of this is that it is hard to provide a reliable insight using these research dimensions to measure resilience at SME context, as (1) currently the nature of disruptions they face have become persistent and numerous in types, (2) there is also a difference in vulnerabilities, for example, between developed and developing countries. In recent years, Biggs et al. (2015) work have assessed the resilience of SMEs using items linked to firms' adaptability, endurance, and responsiveness to minimize their vulnerabilities to climate-induced disruptions in Thailand and Australia. Although Biggs et al (2015) research have considered the company's size in understanding resilience and its measurement, their research did not prove the reliability and validity of the scale. Additionally, the items used by the authors put emphasis on discrete disruptions (i.e., ecological & climate change). Their study also focused on a specific sector i.e. tourism SME's. Thus, we are not quite sure whether the Biggs' SMEs resilience measuring scale can be assumed for varied SME sectors. This all indicates, although there are attempts to measure business resilience exists, there is no consensus on what dimensions characterize the concept in general entrepreneurship and SME context.

Developing robust resilience measure starts with designating a clear definition of the concept in general business organizations and SME context. Once academia gets consensus on the concept, measurement, model, and mechanism of organizational resilience, lots of valuable problems can be studied (Xiao and Cao 2017). Pal et al. (2014) define resilience as the ability of SMEs to "...survive, and potentially even thrive, in times of crisis". According to Manfield and Newey (2017), the resilience term also used to refer business success in multiple areas of organizational science including entrepreneurship, and organizational behavior. Dahlberg and Guay (2015) pointed out that the resilience concept in the business domain, generally, addresses about firm's continuity and successful performance in the face of turbulent situations. Others (e.g., Ates and Bititci 2011, Biggs 2011) state that the resilience describes firm capability to adapt, grow, and minimize vulnerabilities. According to Lengnick-Hall et al. (2011), Hamel and Valikangas (2003), besides this perspective, resilience in business has to designate firm ability to develop new capability-seizing business opportunities within turbulent situations. Management of keystone vulnerabilities describes the identification, proactive management, and treatment of vulnerabilities that if realized, would threaten the organization's ability to survive (McManus et al. 2008, Stephenson et al. 2010). Biggs et al. (2012b) discussed the concept capability and vulnerability are interrelated. As Pettit et al. (2013) note, the company's resilience rises when its capabilities improved in reverse vulnerabilities decreased. When imported into entrepreneurship these characteristics lead to a conceptualization of resilience as being enacted through a capability portfolio (Manfield and Newey 2015). The resilience term holds various capabilities in SMEs.

Drawing on both previous chapters and the above discussions, we adopted the capability view (Manfield and Newey 2015, Markman and Venzin 2014) to operationalize resilience integrating three dimensions: (1) capability to adopt (adaptability); (2) grow (in performance), and (3) seize business opportunities (anticipatory mindset of entrepreneur). The adaptability dimension, here, covers a firm continuous transformation, flexibility, and responsiveness to changes in the environment. A study noted that adaptability lies within the realm of contingency theory, and refers to the interface between an organization and its environment (Alonso and Bressan 2015). Adaptive firms demonstrate a capacity to identify emerging opportunity or

threat (Hamel and Valikangas 2003, Ates and Bititci 2011), to change resource acquisition and allocation with respect to new strategy developments and implementation under changing environmental conditions (Biggs 2011, Bhamra et al. 2011b). Indeed, the adaptive capacity is an essential aspect describing the resilience of SMEs within turbulent situations of DCs. The growth aspect, on the other hand, refers to about maintaining a firm positive performance in term of sales, profits, and in market share (Williams and Vorley 2017). Resilient firms tend to maintain and constantly review their operating and ongoing performance (Dahlberg and Guay 2015). Resilience is also can be characterized by both exploiting and seizing new opportunities (Lengnick-Hall et al. 2011). The seizing business opportunity dimension entails the potential opportunities that whilst discovered by businesses, maintain competitive advantage despite faced threats (Manfield and Newey 2017). Disruptions provide a window of opportunity as it activates transformation within challenges (Lengnick-Hall et al. 2011). Firms can grow and thrive by turning challenges faced into business opportunities (Seville et al., 2015). The business environment has become increasingly turbulent. Constant change necessitated the identification and development of new capabilities critical for firm sustainability, particularly, in the context of vulnerable settings. Thus, the dimension is crucial in entrepreneurialism (Manfield and Newey 2017) and thus it offers additional insight into SMEs resilience research specifically in vulnerable settings. Based on the conceptualization process, we presented these dimensions measuring the resilience of SMEs to PDVBEs context as shown in Fig 1.



Fig 1: SMEs resilience conceptualized based on the existing literature **Understanding resilience in practice: context matters**

Understanding resilience requires contextualizing to nature of disruptions: the more persistent the disruptions, the more resilience is required to run businesses (Littlewood and Holt 2018). Linnenluecke (2017) concluded that research on the measurement of organizations resilience is the primary research in the future. Disruptive situations triggering companies' resilience vary from discrete/specific event based on persistent/complex forms (Bhamra et al. 2011a). The complexity of disruptions refers to the existence of numerous forms of disruptions including drought, political turmoil, infrastructural, regulatory, and institutional obstacles (Linnenluecke 2017). SMEs thought to be more vulnerable to such types of disruptions because of factors such as the relatively constrained resources and the inability to spread the risks across multiple products or markets (Blundel et al. 2014). This is particularly a habitat of DCs business setting, as they are more vulnerable and threatening SMEs performance compared to the developed world (Biggs et al, 2015).

The contextual differences of the vulnerability of companies, for instance in terms of size and gender, are also sensitive issues in understanding the resilience concept in practice.

For example, large companies have slack resources that can be utilized when disruptions occur, but SMEs lack such opportunities (Tognazzo et al. 2016). As a result, SMEs are the more vulnerable companies for which achieving resilience is more complex (Pal et al. 2014). Their limited resource access (Wedawatta and Ingirige 2016), also makes them easily susceptible to disruptions. As DCs business settings are dominated by a traditional and patriarchal system, women entrepreneurs are more vulnerable because the access to essential resources, business ideas, and innovation are more difficult for them when compared to their male counterparts.

Table 1 lists existing studies on organizations resilience measurement (and their contextual focus) and the dimensions they are designed to assess. As we already discussed, there is no consensus on resilience definition let alone SME's resilience measuring dimensions because most of them drive items from other discipline literature (ecology, disaster, and crisis management) and import to organizations studies. Conversely, there is a lack of consistency in the operationalization of organizational resilience as evidenced by the dimensions utilized in these researches.

Some researcher investigated vulnerabilities, adaptive strategies used, or resources allocation, while others examined individual resilience collectively, or identified resilience based on organizational structure, processes, and practices. Though resilience can be developed and assessed from wide-ranging aspects within an organization, a consistent measuring construct is needed that can be applied to any aspect of an organization within and across contexts. Outcomes of resilience do vary, depending on the measures used. Furthermore, among presented dimensions, adaptive capacity is often utilized as part of organizations resilience measuring dimensions. However, still, to use this dimension, it requires contextualizing to entrepreneurship. This dimension describes an organization's ability to constantly and continuously evolve to match or exceed the needs of its operating environment before those needs become critical (Hamel & Välikangas, 2003). To contextualize and operationalize the concept in general business organizations and SMEs, we considered the adoptive capability dimension together with others-ability to grow (maintaining positive performance), and ability seize business opportunities as important dimensions for SMEs resilience in this thesis.

Need for SMEs resilience measurement research in developing countries

Research on the SMEs resilience is scarce in the DCs let alone to its measurement. This is in contrary to the high demand of their resilience knowledge as they operate in the complex and chaotic environment. This may be related to their external environments, encompassing issues such as political instability and conflicts (Branzei and Abdelnour 2010, Tengeh 2016) poorly functioning markets and 'institutional voids', institutional inefficiencies, and infrastructural hurdles (Page and Söderbom 2015) and natural environment hazards (Dahles and Susilowati 2015). It is widely known that entrepreneurial activities will decline in the face of such vulnerability (Tengeh 2016). Although SMEs are often under-prepared for disruptions and can suffer disastrous consequences when they experience them, both empirical and theoretical research examining organizational resilience has traditionally focused upon larger businesses and their environments (Sullivan-Taylor and Branicki 2011). Firm resilience is highly desirable in such a setting to continue business functions. Yet, resilience research into SMEs is relatively rare in the setting and has been identified (Littlewood and Holt 2018, Dahles and Susilowati 2015) as a potential focus for future research. The same is true also for business companies owned by women entrepreneurs, especially in DCs. In established environments of the developed world, resilience may not be as desired as the compared hostile environment (Littlewood and Holt 2018) owing to the cost of developing and maintaining resilience capability.

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Authors	Contexts (companies size, nature of disruption, and study setting)	Key findings/Dimensions used	Disciplines
McManus et al. (2007), (McManus et al. 2008)	Large organizations / natural disaster/ developed world	Anticipatory ability (i.e., situation awareness-ability to forecast potential opportunities and risks); management of keystone vulnerability, adaptive capacity or adaptability (e.g., effective decisions in daily operation and in crises); agility (e.g., timely decision)	Crisis and disaster management
Erol et al. (2010)	Large organizations/community disaster crisis / developed world	Agility, flexibility, adaptability, and connectivity	Developed a framework- enterprise resilience broad, systems-oriented perspective
Somers (2009b)	Large organizations and community/disaster crisis planning / developed world	Continuity of operations planning; Managerial information seeking; Department accreditation; Perceptions of risk; Involvement in planning community; and Organizational Structure	Disaster crisis planning
Pettit et al. (2013)	Large organizations / natural hazards/ developed world	Supply chain resilience (adaptive capabilities)	Supply chain perspective
Kantur and Say (2015)	Medium-sized and large organizations / disaster assessment/ developed world	Robustness-measure the organizations capacity to withstand against and recover from unfavorable conditions. Agility-measure organizations capacity to take actions rapidly. Integrity measures the cohesion among employees in the organization faced with unfavorable circumstances	Systems view and disaster management perspective
(Mallak 1998)	Employees in the health care industry/ natural hazards/ developed world	Adaptability (e.g., perform positive adaptive behaviors), agility (e.g., expand decision-making boundaries), flexibility (e.g., ensure adequate external resources)	Psychology perspective
Lee et al. (2013)	Large organizations/community crisis and disaster/developed world	Adaptive capacity and planning	Disaster Management (Assessment)
Ambulkar et al. (2015)	Large logistic organizations/ developed world	Adaptive and cope with supply chain disruption changes	Risk management and Supply chain perspective

Table 1: the review of existing measurements research on organizational resilience from the literature

In addition, the nature of disruptions in such a setting is highly persistent and facing continuous disruptions instead of discrete types of disruption (Tengeh 2016) that trigger the need for a more practical insight by using a context related measurement. The DCs is a suitable setting for SMEs resilience measurement development, because they operate under very tougher business environment, given their assumed role for employment and more generally, in ensuring household livelihood (Barrett et al. 2017, Nagler and Naudé 2017). Nevertheless, significant pieces of literature in the past have more focused on specific types of disruption such as the disaster and crisis happenings (Kantur and Say 2015) and seem to characterize companies' business resilience from such perspectives. This kind of literature only addresses the resilience of companies when the disruptive situation occurs. These natures of persistent and complexity of disruptions which demand organizations to build resilience to ensure their business continuity require more attention (Littlewood and Holt 2018, Sabatino 2016).

Methodology

This chapter aims to contribute to the literature by developing a robust scale for measuring resilience at the SMEs within the PDVBEs (a phenomenon of business environments in DCs). In doing so, we followed Ambulkar et al. (2015) method. This method consists of five major steps: (1) Review of extant literature to generate dimensions, (2) adopting items for each dimension from existing literature, (3) Design the survey and made reviewed by experts and academician. In addition, conduct pilot study to ensure the face validity, (4) redefine the survey and carry out with refined survey the data collection, (5) deploy confirmatory factor analysis to develop the scale. Fig 3 below shows the summary of these major steps followed for developing and validating the resilience construct.

Study settings and population

To realize this study in Ethiopia, from Oromia regional state, two provinces (the Arsi and East Showa), were chosen as the study setting. Ethiopia and especially Oromia regional state has major political turmoil over the last 4 years (2013-2017). These provinces in the region were chosen due to the interesting (i) economic and (ii) geographical features in the country, and (iii) center of high political turmoil shaking the country in recent years. Even during this fieldwork (March 1-Augusts 30, 2016), we realized massive turbulence and riots in the country and which was practically very tough in these provinces. Additionally, by taking data from both provinces together, we believe they make our study more convincing for accessing adequate samples, different sectors and get better insights about SMEs in Ethiopia. In addition to the higher concertation of SMEs, these provinces have better access to microfinance institutions, Oromia saving and credit, and the Wassa, the two largest MFIs operating in the provinces. The two regions are also the economic center in Ethiopia found nearby Addis Ababa, the capital city of the country. The MFIs have cooperated in providing a list (of SMEs) of the study population. They have branch offices in both areas so that we are able to derive adequate samples for the study. This study is conducted by using the list of SMEs from Assella, Adaama, Bishoftu, Meqi, and Zeway being branches of these MFIs in the above-mentioned provinces.

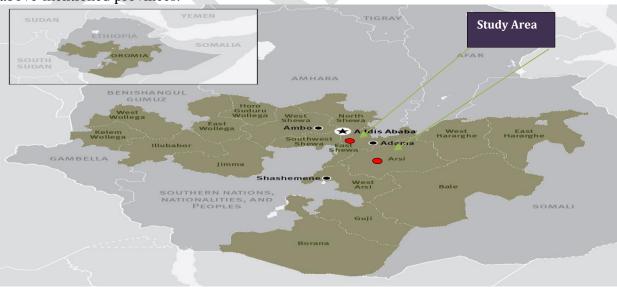


Fig 2: The study setting in Ethiopia

Data collection procedures

Before embarking on the data collection process, we visited organizations working on the micro-enterprise development and the regional MFIs officers. The purpose of the visit was to create awareness and get adequate support from the officers who have direct contact with entrepreneurs. Prior to launching the survey, the survey was pretested with five faculty members and 4 industry experts affiliated to SME supporting institutions' to generate feedback (see list in Table 2, in Appendix). These experts helped us in assessing the content, meaning, and each item statement in detail. Hence, their feedback has ensured the face validity of the items that adopted from the existing literature as recommended by (e.g., Nam et al. 2016, Yilmaz-Börekçi et al. 2015). Feedback from the pretested sample was then used to improve the survey and prepare it for distribution to a larger sample. We then moved to conduct the pilot interview with the selected SME owner-entrepreneurs using the drafted questionnaire, meant to get information about the construct of resilience in the SMEs in such context in detail. During the timeslot of the pilot study (March 1-20, 2016), there was political turmoil that disrupted SMEs performance in the country in general and to the study region in particular. Considering such context, we interviewed the pilot participants in a way to compare their companies' performance during the turmoil to stable ones and that enabled us to explore items measuring the resilience construct as suggested by e.g., Yilmaz-Börekçi et al. (2015). Based on the feedback gained from experts and pilot interviews, we finalized the questionnaire for the survey. Consequently, the data collection task was conducted between March 1- August 30, 2016.

We did a face-to-face interview mostly in the respondents' business place. Our survey incorporated wide ranges of sectors and that to draw a broader view about SMEs resilience in DCs (such as in Ethiopia). Table 3 presents the distribution of SME based on the sectors type in the sample. Results showed that 147 of them were operating in the trade, 80 were in the agribusiness, 60 were in the manufacturing, 58 were in the consumer-related services, 24 were in the transportation, 22 were in construction, and 17 of them run other activities. Based on the gender of the entrepreneur, we find equivalent male and female entrepreneurs representation in our sample. Regarding the duration (age) of the enterprises, results show that the sample varied and consisted of SME from 1 year to 32 years old businesses.

SMEs sectors/business types	Number of SMEs per	Gender of entrepreneurs		Range of age of firms
	sectors	Female	Male	
Consumer-related activities (e.g.,	58	43	15	1 -14 years
restaurants)				
Agribusiness-oriented (e.g., dairy and	80	41	39	1 -17 years
poultry)				
Manufacturing activities (e.g. metal work)	60	12	48	1 -17 years
Construction sector	22	6	16	1 -5 years
Trade of various commodities	147	82	65	1-32 years
Business services (e.g., transportation)	24	9	15	1-5 years
Others	17	8	9	1-5 years

Table 3: Characteristics of the Study Sample (n = 408).

Measures

Based on the results of the in-depth review of existing literature by Saad et al. (2018), experts' feedback and the pilot study on selected entrepreneurs, we conceptualized SMEs resilience construct as multi-dimensional consisting of firm capability to adopt (adaptability), growth (maintaining positive performance), and seizing business opportunities. To measure adaptive dimension, we adapted items from prior studies (Peng and Luo 2000, Park and Luo 2001, Ma et al. 2009, Ambulkar et al. 2015). There is little agreement in the existing literature on how to measure the growth dimension and scholars have used a variety of different measures. For this study, we adopted measures for growth (growth of sales, profits, and market share) from Patzelt and Shepherd (2011). The seizing opportunities are measured from previous research (Ozgen and Baron 2007, Singh et al. 1999) relating to the firm ability to discover,

recognize and exploit a business opportunity. SMEs resilience was operationalized using 12 items measured on a seven-point Likert scale (1=strongly disagree, 7=strongly agree). The list of these items as they appear in the survey questionnaire is shown in the appendix (see in Table 4).

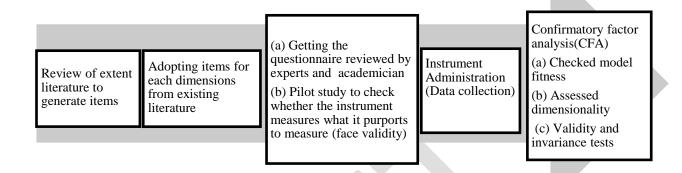


Figure 3: Summary of the construct Development and validation process

Analytical procedures

We applied the step-wise procedure to validate the robustness of the scale. First, we conducted the exploratory analysis to decide the items that retained in the scale. To retain items, we adopted Hair et al. (2013) recommendation: a factor loading value above 0.6. One item has loading below 0.60 and therefore excluded from the analysis. Overall, 11-items SMEs resilience scale has Cronbach's alpha value of 0.942. The results of the exploratory factor analysis are available in Table 5. In the second step, we deployed a confirmatory factor analysis (CFA) to validate the robustness of three dimensions of resilience construct for SMEs as underpinned in prior sections discussion. Here is, we assessed and compared the competing measurement models fitness to data. In the third step, we conducted validation tests including invariance test to prove the items equivalence across gender of SMEs-owned entrepreneurs.

To assess the goodness of fit for competing measurement models, the $\chi 2$ test often used. Nevertheless, Jöreskog (1969) stated that the $\chi 2$ test has a drawback since the test is highly dependent on the sample size. The significance can be easily attained if we use large sample sizes (Hair et al. 2012). It is recommend therefore supplementing this test with other indices (El-Adly and Eid 2017) such as (1) chi-square to degree of freedom ratio (x2/df), (2) Goodness of fit index (GFI), (3) comparative fit index (CFI), (4) Tucker-Lewis Index (TLI) , and (5) Akaike information (AIC), and (6) Bayesian information criterion (BIC). Hence, we deployed these indices to compare and then chose the best-fit model to the data from competing different SMEs resilience measurement models.

Results

Confirmatory Factor Analysis (CFA)

The next step was to assess the dimensionality of the construct using confirmatory factor analysis (CFA). CFA is a well-established technique for model testing and robust measurement development (Hair et al. 2012, Fornell and Larcker 1981). The three-dimensions of resilience construct were subjected to CFA analysis. We adopted a maximum likelihood estimation to examine the robustness of these three hypothesized resilience dimensions for SMEs. Following El-Adly et al. (2017), we tested and compared a series of models to choose the best fitting model to the sample data. We tested a series of models consisting of (A) a one- factor model

(suggesting that the all observed items represented a unidimensional construct); (B) a two-factor model, including adaptive and seizing opportunities capabilities, to serve as components of a two dimensional construct; and (C) a three factors model (comprising adaptive, growth, and seizing opportunities) as a three dimensional construct.

Table 6 results display the indices of the competing models. Analysis of the indices supports the hypothesized three-dimensional construct for SMEs resilience (see model c), comprising companies' adaptive, growth and seizing business opportunity capabilities. When standardized item loadings are analyzed (see Fig 4), it is observed that all items significantly load on their dimensions. When the indices are analyzed it is observed that this model not only has the lowest X^2/df , and but it also has the highest GFI. CFI is 0.95, and TLI is 0.93. Although model B fit best in AIC and BIC indices. We still consider model C as the best fit, considering the principle that the model with more fit indices is better (El-Adly and Eid 2017). As a result, we continued the validation tests with model C. This study found that the resilience in an SME context is a multidimensional construct and that it integrates three sub-dimensions. This finding

Model	X^2	df	X^2/df	GFI	CFI	TLI	AIC	BIC
Α	806.9	44	19.7	0.94	0.80	0.75	12281	12413
В	165.6	14	11.8	0.93	0.93	0.89	8103	8187
С	230.6	41	5.6	0.99	0.95	0.93	11710	11854

agrees to Kantur and Say (2015) analysis.

Table 6: Goodness of Fit Indices ²

After choosing the model, respecification or modification is conducted to assess for possible improvement of the fitness to the data (Ahmad et al. 2011, Byrne 2001). According to Byrne (2001), a modification of the chosen model or searching the best fitting model aids to correct for inappropriate parameters encountered in the estimation processes and thus helps to attain on the robust measurement structure. The modification search process is conducted by considering the residual covariance statistics. We set a minimum threshold of 10 covariances static. We draw covariance for all items in which the covariance statistics are above 10. Following this, we made an exhaustive search process (modification) for possible improvement of the fitness of the measurement model (X^2 /df=4.35, GFI=0.99, CFI= 0.969, TLI= 0.952) and that we, finally, arrived at a resilience measurement framework that is shown in Fig 4.

² Note: X2/df≤ 6, GFI≥ 0.90; CFI≥ 0.90; TLI≥ 0.90; ; and the lower the AIC and BIC is the better the model Bagozzi, R. P. & Yi, Y. 1988. 'On the evaluation of structural equation models.' *Journal of the academy of marketing science,* 16:1, 74-94, Bagozzi, R. P. & Edwards, J. R. 1998. 'A general approach for representing constructs in organizational research.' *Organizational research methods,* 1:1, 45-87, El-Adly, M. I., El-Adly, M. I., Eid, R. & Eid, R. 2017. 'Dimensions of the perceived value of malls: Muslim shoppers' perspective.' *International Journal of Retail & Distribution Management,* 45:1, 40-56.

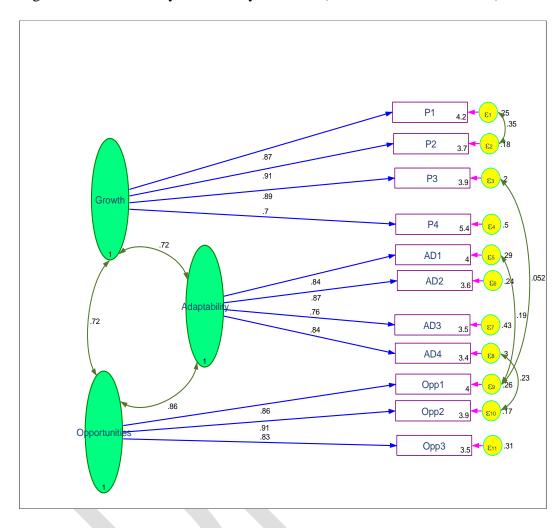


Figure 4: a confirmatory factor analysis results (SMEs resilience construct)

Reliability and validity tests We conducted a series of validation tests (reliability, convergent, discriminant, and invariance) to ensure the robustness of the measurement developed.

Reliability test

Reliability assesses the degree to which a set of indicators of a latent construct is internally consistent based on how highly interrelated the indicators are with each other (Hair 2010). To check the reliability of the construct, we tested a composite reliability. This test is useful as it helps to assess the internal consistency of the items used (Hair et al. 2006). Meaning, it provides evidence that all items have measured the general resilience construct. According to Fornell and Larcker (1981), to pass this test, each dimension needs to score above 0.70. The formula used by Fornell and Larcker (1981) to calculate the composite reliability will be:

$$\omega = (\sum \lambda)^{2} i / ((\sum \lambda)^{2} i) + \sum ei)$$

Where ω is the coefficient of

composite reliability, λi and ei is the ith factor loading and its uniqueness (McDonald 1970).

	Construct dimensions	ω
	(1) Adaptability (AD)	0.91
(2)	Growth-maintaining positive performance (P)	0.90
	(3) Seizing opportunities (Opp)	0.90

Table 7: Reliability of business resilience construct³

As shown in Table 7, the composite reliability score for all dimensions exceeds the Fornell & Larcker (1981) threshold. This indicates that the items used to measure resilience construct have strong internal consistency and that they contributed to general resilience construct.

Construct validity

To ensure the robustness of the developed construct (Barclay et al. 1995) assessing the construct validity is essential. The convergent and discriminant assessments are the often-used approach to test the construct validity.

Convergent validity

The items that are indicators of a specific construct should converge or share a high proportion of variance, known as convergent validity. According to Hair et al. (2006), various procedures are available to test the relative amount of convergent validity among item measures. Here we have adopted two approaches. (a) Factor Loadings. The value of the factor loading is one important consideration. High loadings on a factor indicate that they converge on a common point, the latent construct. At a minimum, all factor loadings should be statistically significant. We adopted Hair (2010) highest threshold at least score 0.7 value. Results displayed in Fig 4 show that all items loading value is above the threshold and significant, thus this test satisfied. The second approach is to calculate the average variance extracted (AVE). AVE is calculated from the items loading value on a construct and is a summary indicator of convergence. Based on Fornell and Larcker (1981) recommendation, the AVE value can be calculated using standardized loadings:

$$AVE = \sum_{i=1}^{n} Li^{2} /n$$

The Li represents the standardized factor loading, and it is the number of items. So for n items, AVE is computed as the total of all squared standardized factor loadings (squared multiple correlations divided by the number of items. An AVE of 0.5 or higher suggesting an evidence of convergence validity (Fornell and Larcker, 1981). An AVE measure should be computed for each dimension (latent construct) in a measurement model. As indicated in Table 8, the AVE values for all dimensions found above 0.50 and thus confirmed the convergent validity of the resilience construct.

Dimer	nsions of resilience construct	AVE
(1)	Adaptability (AD)	0.69
(2)	Growth-maintaining positive performance (P)	0.72
(3)	Seizing opportunities (Opp)	0.75

Table 8: Convergent validity of business resilience construct

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³ Note: $\dot{\omega}$ =Cronbach's alpha value; λ =Composite reliability

Discriminant validity

Discriminant validity assesses to what extent these items measuring the resilience construct are unique from each other (Henseler et al. 2015). To investigate the discriminant validity, we followed (Hair et al. 2006) procedures. First, we checked all items loadings seen in Fig 4. Our analysis shows that all items have a loading value exceeding the 0.5 recommended by Fornell and Larcker (1981). Next, we used the correlation matrix and the square root of AVE to assess the discriminant validity of the dimensions. To meet the conditions for acceptable discriminant validity, Fornell and Larcker (1981) suggested that the square root of average variance extracted (AVE) of each dimension should be higher than the correlations between any combinations between any two pairs of dimensions in the model. The logic here is based on the idea that a latent construct should explain more of the variance in its item measures that it shares with another construct (El-Adly et al. 2017). Passing this test provides good evidence of discriminant validity. Results shown in Table 9 confirmed that the square root of AVE for all dimensions (diagonal) is greater than any correlation value among dimensions, except for correlations between AD and Opp. Hold out such exception; the measurement model represents a good discriminant validity.

	Dimension 1	Dimension 2	Dimension 3
Adaptability (AD)	0.84		
Growth-maintaining positive performance (P)	0.74	0.85	
Seizing opportunities (Opp)	0.89	0.76	0.87

Table 9. Discriminant and correlations matrix between constructs⁴

We analyzed to what extent the exception can be tolerated. As per Fornell & Larcker (1981) recommendation, two criteria needed to overpass such exception. First, we verified the existence of a significant inter-correlation among dimensions. Our analysis confirmed that the inter-correlations among the three dimensions were significant at (P<0.001). Second, we checked each items factor loadings and (Farrell 2010) recommended values greater than 0.5. As shown in Fig 4, the CFA analysis results show that all items scored a loading value greater than 0.5. Based on these diagnoses, we decided that the exception could be tolerable. The implication of this is that all items are distinguishable, and this ensured the discriminant validity of the measurement model as per Fornell & Larcker (1981) suggestion.

As shown in Table 8, the resilience measurement for SMEs integrates three dimensions. The correlations among all dimensions of resilience construct are positive and significant. This implied that to measure the resilience of SMEs, researchers have to consider holistically (El-Adly and Riyad Eid, 2017) the three dimensions together rather than piecemeal.

Measurement invariance

The cross-culture entrepreneurship researchers have called that testing measurement invariance is essential to ensure robustness of the scale developed, as there exist differences in motives and aspirations towards entrepreneurialism among a different group of entrepreneurs (Runyan et al. 2006, Runyan et al. 2012). While sex is a biologically based categorization system that classifies individuals as male or female, gender is the socially-situated conduct that aligns normative expectations of appearance, attitudes, and behaviors of men and women (West and Zimmerman 1987, Runyan et al. 2006). Thus, gender includes social roles that are based on biological sex but created through socializing systems (Ridgeway 2011). Due to differences in social position, the aspiration of resilience and their response action to disruptions may be different between women and men entrepreneurs (Young et al. 2017). Meaning, the items measuring the resilience construct and its underlying dimensions may perceive differently

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⁴ Note: N=412. In **bold** the square root of AVE. All correlation values are significant at p< .001 level.

(Runyan et al. 2012), driven by entrepreneur's (e.g., women) position in the family and as well as in the society.

There are various invariance tests in the literature (Bagozzi and Yi 1988). In this study, invariance tests were performed using: configural and metric invariances. The results for each invariance test are explained below (see Table 10 invariance tests⁵ results and their corresponding decisions).

	<u> </u>							
Test types	χ2	df	P	χ2/df	CFI	TLI	Action	Decision
Configural	331.89	95	0.000	3.49	.93	.92	Nothing constrained-two	Accepted/Robust
invariance							group model estimate	
Metric	334.08	96	0.000	3.48	.93	.92	Factor loading constrained	Accepted/Robust
invariance								

Table 10: invariance tests

The configurable invariance test shows whether the factor loadings have equivalent value across the male-female groups. To evaluate configurable invariance, we assessed the twogroup CFA model (where no cross-group constraints imposed). Results indicate the two-group model fits the data well (see their χ^2 (95) =331.89, p<.00, χ^2 /df=3.49, CFI=.93, and TLI=.92). These results elucidate that the resilience scale displays configurable invariance across two groups. Meaning, the measured items show the same pattern of loadings for men and womenowned SMEs. Next, we fit the same two-group model to test metric invariance, to examine if the factor loadings are equivalent or different across the group. Under metric invariance, the factor loadings are constrained to be equal across groups, but no other equality constraints are imposed (Bagozzi and Yi 1988). To do so, we constrained all of the factor loadings to be equal across groups. Results again confirmed that the model fit the data well (χ 2 (96) =334.08, p=.00, X²/df=3.48, CFI=. 0.93, and TLI=.92). We also conducted a chi-square difference test between the two models. The difference was not significant ($\chi 2$ (1) = 2.19). We conclude that the business resilience construct is metrically invariant across the gender of SMEs-owner, allowing meaningful group comparisons to be made. These tests have confirmed these items used to construct the resilience scale are equivalent across gender of SME-owners.

Discussion, implications, and limitations

SMEs are the backbone for many countries' economy but also the most vulnerable companies due to unfolding disruptions emanating from their business environment. The disruptive situations threatening SMEs existence in developing countries are recurrent, numerous and chaotic in character. Therefore, in such persistently disruptive and vulnerable business environments (PDVBEs), typical of circumstances that prevail in DCs, research on SMEs resilience is imperative. A major milestone in identifying valuable strategies from SMEs to deal with such a context requires having a robust instrument for measuring resilience. However, the resilience concept is in its infancy stage in an SME context and thus requires a robust resilience-measuring instrument to be used for the research in such a setting. Resilience understanding is context dependent (Linnenluecke 2017). We explore robust resilience measurement in the context. This chapter contributes to research focusing on SMEs resilience and its measurement development in a number of ways. Specifically, it contributes towards addressing the research gap on SMEs resilience measurement. This work also contributes to wider scholarship on resilience in SMEs, especially those in challenging and unpredictable environments, and in so doing showcases Ethiopia as a rich setting for such a research.

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⁵ The fitness indices:X2/df \leq 6; CFI \geq 0.90; TLI \geq 0.90

The findings of this study have both theoretical and practical implications. Theory building is the main research focus within the area of company resilience at this stage (Bhamra and Dani 2011). Most of the studies are theoretical and qualitative pieces. To our knowledge, this study introduces the first measurement scale for resilience in the context of SMEs and PDVBEs (i.e., DCs). Thus, it contributes to the literature as an important step in broadening the understanding on how to develop better instruments for a specific context as the conceptual understanding is a highly influenced by the nature of disruptions that varies from context to context. Researchers may take the advantage from this effort and consider those items in their research. Second, we suggest that the resilience dimensions and items identified here have a practical use for SMEs in DCs (i.e., Ethiopia). This helps SMEs owner to have a comprehensive inventory of their firm performance, which can be used to identify areas of strengths and areas that need improvement. SMEs wishing to sustain their existence need to set appropriate strategies to maintain their firm resilience in the mid of PDVBEs. Their sustained venture has a triple down effect on the livelihood of the firm owners and economies of the countries as well as they play a crucial role in employment generation. Third, the findings also have implications for organizations that aim to support SMEs to become more resilient and successful in their business venture. Government institutions, NGOs, policymakers, and development organizations can take into consideration the key resilience components in their development intervention agendas.

The findings show that the resilience construct of SMEs in PDVBEs (i.e., in Ethiopia) context is multi-dimensional and consists of three dimensions: growth, adaptability, and seizing business opportunities. The present study hence validated previous researches (Williams and Vorley 2017, Annarelli and Nonino 2016b, Ates and Bititci 2011) which theorized resilience as multidimensional. These three dimensions are the key attributes for measuring resilience in the Ethiopian SMEs context. Although the basic theory applies, the construct may need to be added or modified on the basis of the specific context (Chu 2015). Diverse nature of disruptions and cultural differences may suggest alternative dimensions to be considered indicating the possible modification of the present measurement in line with diverse context (Sullivan-Taylor and Branicki 2011). This could include the extension and hence modification of the dimensionality of the SMEs resilience construct depending on the specific context. For example, Kantur and Say (2015) research, which developed the measurement for large organizations, supported the multidimensionality although used different items which were adopted from crisis and conflict management literature. Our research differs in that we developed a construct of resilience from items often used in entrepreneurship and SME literature. We call for future research to integrate items used by Knatur and Say's into the current developed SME's scale and so that validate whether they are still relevant for SME resilience measurement too.

Finally, several scholars in recent years have raised concerns that entrepreneurship and firm resilience does not take place in a gender vacuum (Marlow 2002, Young et al. 2017). The effect of this is that SMEs vulnerability to disruptions and their response may vary based on the socio-economic class of business owners such as gender (West and Orr 2007), making it likely that these groups would perceive resilience measuring items differently and/or make different resilience investment decisions (Young et al. 2017). A study suggests that higher risk aversion and deeper commitment to long-term employees prompt female business owners to make decisions that improve firm resilience to disaster (Danes et al. 2009). To arrive at such kind of a conclusion requires first ensuring the measurement equivalence across male and female entrepreneurs. Because to generate reliable insights into comparative analyses a bias-free

measurement is a prerequisite. Following this reasoning, our work adds to existing research testing the scale-developed invariance using two often-used invariance tests (configural and metric). The tests ensure that our instrument is invariant and thus it can be used for comparative analysis to generate reliable research insights about gender difference related concerns on SMEs resilience in DCs.

The present research develops a robust resilience measurement that furthers the assessment of the level of resilience of SMEs in the DCs environment. The measure could help the policymakers to evaluate how SMEs become more resilient and contribute well to the economies in the context. The proposed scale can be used as a diagnostic tool for SMEs to take appropriate decisions on how to create resilient companies. The instrument could also help SMEs to compare their level of resilience with the average level found in this study. When their self-assessment is low, the resilience measuring items in this study will provide some suggested areas on which to focus attention. The successful implementation of resilience scale will generate substantial insights about SMEs development for entrepreneurs, policymakers, and practitioners as well in the study context.

We also put more future research avenues to advance the resilience theory. We argue that developing the scale measuring SMEs resilience is necessary but not the end by itself. Exploring what drive this scale is also pertinent research. For along research related to the importance of being resourcefulness for firm success and performance have been dominating SME literature mainly drawing a resource-based view approach. However, several scholars in recent years suggest that possessing various resources is necessary, but they are not sufficient conditions to ensure firm development. In his work Sirmon et al. (2007) proposed that what matters more is rather the entrepreneurial resources orchestration actions (i.e., resource structuring, bundling, and leveraging actions taken by entrepreneurs). Drawing this perspective, Miao et al. (2017) suggested the firm owner's entrepreneurial orientation (referring the practices, decision-making styles, strategies, and behaviors) drive these actions. Effective management of these actions via entrepreneurial orientation (EO) thus relevant for developing resilient SMEs. Future research should investigate if these resource orchestration actions channeled via EO really matters to advance SMEs resilience in Ethiopia and other similar emerging economies using the scale.

Although this study has theoretical and practical implications, the current study still has some limitations. First, due to lack of consensus on what is resilience of SMEs, the concept is used to refer many other related aspects such as survival, flexibility, vulnerability, responsiveness, sustainability, and robustness (see chapter 2, pp:8-10). Consistent with the work of Manfield and Newey (2017), who argued the resilience concept holds a portfolio of capabilities. We combined these diverse attributes into resilience capabilities, as they are interrelated to one another and hence we limited to three dimensions (firm growth, adaptability, and seizing business opportunities) to describe resilience construct in SMEs and in the DCs context. Future research may include more other dimensions depending on the particular context and improve our holistic understanding of the resilience of SMEs. Second, the samples of the study may be another limitation. We only selected samples from two microfinance institutions in the context of Ethiopia due to budget and research time constraint. This may limit in the generalizability of the results to other types of SMEs in another similar context. In the future study, it will be valuable to repeat the present study in other types of SMEs in Ethiopia and in the other DCs economies.

Conclusions

Our goal with this study was to develop robust resilience measurement for SME in PDVBEs (in a highly vulnerable business environment in the DCs). As part of the initial step, detail literature review to adopt items from existing literature and pilot study were conducted. Based on the feedback of the pilot study, the survey instrument was developed to test for reliability and validity. Using systematic random sampling techniques, we collected data from 408 SMEs in Ethiopia and then the scale is tested using confirmatory factor analysis and invariance tests. The results showed that SMEs resilience construct is dimensionalized with three dimensions of growth, adaptability and seizing business opportunities, and the scale has acceptable reliability. The construct has acceptable convergent and discriminant validity. Furthermore, analysis of invariance of SMEs resilience construct revealed the consistency in factor structure between men and women entrepreneurs and supported configural and metric invariance across the groups. Overall, the results showed that the 11-item SMEs resilience scale developed in the current study is a reliable and valid scale. SMEs resilience scale developed in the current study has a three-dimensional structure. The first dimension is growth includes four items and measure the firm capability to maintain positive performance in the mid of disruptive and vulnerable circumstances. The second dimension is adaptability includes four items and measures firm capability to minimize the vulnerability to disruptions in light of competitor has and ability to cope up with changes. Lastly, seizing business opportunity includes three items and measures the opportunity recognition and exploiting efforts firms made to ascertain business continuity despite faced hostile environments. In conclusion, the scale developed in the current study aims to contribute to the development of quantitative studies in the SMEs resilience research by developing a robust scale. Future research is needed to revalidate the scale with a diverse set of samples such as different contexts, different sectors and developed and developing countries comparison.

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Appendix A

Table 2 List of experts and pilot interview participants

Name	Role	Address/organizations
Beleyneh Legesse (PhD)	Researchers/Academician	Haramaya University
Jeylan Wolie (Ph.D.)	Researchers/Academician	Haramaya University
	(Language editorial)	
Adem Kedir(PhD)	Researchers/Academician	Arsi University
	(study province)	
Amanuel Zewgie	Researchers/Academician	Adama University
	(study province)	
Gezehegn Abebe	Wasasa Microfinance	Arsi province
Hirut Makuria	Wasasa microfinance	Arsi province
Tesfaye Gurmu	OCSSACo microfinance	East Showa province
Hashim Kedir	Microenterprise development office	East Showa province
Bezu Deribe	Microenterprise trainer (vocational	Arsi province
	college in Assella)	
Zerihun Wodaje	Entrepreneur	East Showa province
		(Adama)
Siraj Kemal	Entrepreneur	Arsi province (Assella)

Table 4: Items measuring business resilience (from the questionnaire)

Resilience dimensions	Resilience measuring items	Scale
Growth- maintaining	P1: My firm sales increased since the founding of the company, and I expect the same for the coming 2 years.	1=strongly disagree, 7=strongly agree
positive performance	P2: My firm profits increased since the founding of the company and I expect the same for the coming 2 years.	1=strongly disagree, 7=strongly agree
(P)	P3: My firm market share increased since the founding of the company and I expect the same for the coming 2 years.	1=strongly disagree, 7=strongly agree
	P4: Overall I expect my firm will grow fast despite facing challenges and disruptions.	1=strongly disagree, 7=strongly agree
Adaptability (AD)	AD1: My firm's ability to handle potential threats from the environment has been greater than that of our major competitors.	1=strongly disagree, 7=strongly agree
	AD2: My firm's capability to succeed in an intensely disruptive business environment has been greater than that of our competitors.	1=strongly disagree, 7=strongly agree
	AD3: My firm's capability to handle potential threats from the environment has been greater than that of our competitors.	1=strongly disagree, 7=strongly agree
	AD4: My firm's capability to adapt quickly to uncertainty in business environments (law, policies, and competitions) has been greater than that of our competitors.	1=strongly disagree, 7=strongly agree
Seizing business	Opp1: My firm regularly monitors any changes and potential business opportunities in our industry of operation.	1=strongly disagree, 7=strongly agree
opportunities (Opp)	Opp2: In the coming six months, my firm will create new business ventures.	1=strongly disagree, 7=strongly agree
	Opp3: While running routine day-to-day activities, my firm recognizes various potential business venture ideas for expansion.	1=strongly disagree, 7=strongly agree
	Opp4: My firm will close in the near future, as a new venture opportunity has not yet recognized. (Reverse score).	1=strongly disagree, 7=strongly agree

Table 5: Exploratory Factor Analysis (Items loading value)

Table 5: Exploratory Factor Analysis (Items loading value)	
Items description	Loading value
Growth (performance)	
P1: My firm sales increased since the founding of the company, and I expect the same for the coming 2 years.	0.89
P2: My firm profits increased since the founding of the company and I expect the same for the coming 2 years.	0.88
P3: My firm market share increased since the founding of the company and I expect the same for the coming 2 years.	0.86
P4: Overall I expect my firm will grow fast despite facing challenges and disruptions	0.69
Adaptability	
AD1: My firm's ability to handle potential threats from the environment has been greater than that of our major competitors.	0.79
AD2: My firm's capability to succeed in an intensely disruptive business environment has been greater than that of our competitors.	0.78
AD3: My firm's capability to handle potential threats from the environment has been greater than that of our competitors.	0.72
AD4: My firm's capability to adapt quickly to uncertainty in business environments (law, policies, and competitions) has been greater than that of our competitors.	0.78
Seizing business opportunities	
Opp1: My firm regularly monitors any changes and potential business opportunities in our industry of operation.	0.82
Opp2: In the coming six months, my firm will create new business ventures.	0.84
Opp3: While running routine day-to-day activities, my firm recognizes various potential business venture ideas for expansion.	0.77
Opp4: My firm will close in the near future, as a new venture opportunity has not yet recognized. (Reverse score).	Deleted - 0.18

Entrepreneurial Resource bundling and leveraging in resource-scarce and resource demanding environment: empirical evidence from Ethiopia

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Abstract

If resources and capabilities are not changed into activities, routines, or business processes, companies are not able to build resilient companies, which is a crucial concern in the face of a turbulent environment (Ates and Bititci 2011). This dynamic view of resource deployment emphasizes the role of entrepreneurs (Helfat 2007; Sirmon et al. 2007). In this study, EO reflects the volitional role of entrepreneurs to bundle and leverage resources into business resilience. 'Gender' is seen to reflect possibilities and constraints of entrepreneurs to enact their volition. This resource orchestration study is conducted in Ethiopia, a developing country with typical resource constraints and the continuous threat of disruptive events, on the bases of a sample of 408 SMEs. Our results indicate that EO is related to mobilizing resources and boosting business resilience although hampered by disruptions in the business environment. Gender moderates the relationship between EO and resources, and between resources and business resilience. These results mean that females entrepreneurs are found to be better than male entrepreneurs in bundling specifically human capital and social ties resources and outperform male counterparts in boosting business resilience. This despite the fact the business environment for females is more harsh for them in the study context.

Keywords: Resource orchestration, bundling and leveraging, entrepreneurial orientation, and resource-scarce environment

Introduction

If resources and capabilities are not changed into activities, routines, or business processes, companies are not able to build resilient companies, which is a crucial concern in the face of a turbulent environment (Ates and Bititci 2011). Activities, routines, and business processes are the mechanisms through which resources and capabilities get exposed to market processes where their ultimate value and ability to generate competitive advantages are realized (Ray et al. 2004). To be able for firms to perform is thus not because of "what they are", but due to "what they do" (Sheng et al. 2011, Sirmon et al. 2008). Building on acquired resources, bundling and leveraging of resources are the subsequent management activities to meet the firm's unique needs (Miao et al. 2017)⁶ in this case resilience. Maintaining and developing resilience is researched in a, compared to this aim, paradoxical situation i.e. a resource constraint and – scarce empirical setting confronted with the resource-consuming firms' need of developing and maintaining resilience. This paradox is even stronger for SMEs which inherently have a restricted resourcing situation (Aldrich & Auster, 1986; Sullivan-Taylor & Branicki, 2011; Tognazzo, Gubitta, & Favaron, 2016). Particularly SMEs in DCs face the challenge of resilience as they lack strategic resources, such as skills, knowledge, and finance due to barriers related to the business environment (Worku, 2013). Although management of resources is substantial for the success of firm's strategies (Du et al., 2018; Hsieh & Tsai, 2007), the effective and efficient use of resources is under-researched (Sirmon et al, 2011). To

⁶ For multiple reasons, scholars cannot appear to agree on the definition of resilience in general business, entrepreneurship and SMEs context, as evidenced by plenty of definitions. However, there seems a shared understanding among them that term business resilience at least circles around three key organizational capability aspects: adaption, growth and performance, and seize new business opportunities (Saad et al., 2018).

understand how scarce resources are conversed into capabilities and leveraged into focussed operations is of importance to understand how resilience is continuously constructed by SMEs in DCs.

Adopting in this study the Resource Orchestration Theory (ROT) is in line with the call of Miao et al. (2017) to understand entrepreneurial resource bundling and leveraging actions. Bundling encompasses combining existing and newly acquired resources to create capabilities. Of importance to resource leveraging is resource mobilization whereby entrepreneurs direct and coordinate resources for their particular usage (Helfat 2007, Sirmon et al. 2011). The leveraging action includes among others the deployment meaning the arrangement and configuration of resources in a way that generates the superior performance desired by entrepreneurs (Sirmon and Hitt, 2009). Deployment is dependent on the breadth of resources across the firm (Sirmon et al., 2011) and the interconnection of resources which effects go beyond the individual effects of deploying resources (Hitt et al., 2016).

As the resource orchestration framework (ROT) proposed by Helfat (2007) and Sirmon et al. (2007) emphasizes process-oriented and strategic conversion of scarce resources into capabilities and actions, and the manager's role in that conversion, we argue that the orchestration of resources will vary and thus that the effects on resilience will vary (see Wong et al. 2018). This active approach to resources is a response on the basic consideration that resources in themselves are "something a firm possesses or has access to, not what a firm is able to do" (Grössler and Grübner, 2006) or for that matter, as we may add, is able to achieve. Higher capabilities lead to a higher firm business resilience level and developing a fit between a firm's resource bundling and its leveraging strategy is key in this (Sirmon et al. 2008). ROT incorporates thus strategy implementation issues (see Sirmon et al., 2011) in its logic to link resources to a firm's performance.

In order to achieve business performance, entrepreneurs will shape their management activities according to their specific firm's context (Fuentes-Fuentes et al. 2015). Entrepreneurship placed in a resource-deprived environment opens the question of how entrepreneurs in such an environment shape and enact their activities. In this study we take two contingent perspectives to shape and enacting entrepreneurial activities i.e entrepreneurial orientation (EO), covering the strategic capability of entrepreneurs (Dess and Lumpkin 2005), and gender, reflecting the level of the constraint of the context to act as an entrepreneur (see Mozumdar, 2018).

Scholars in the entrepreneurship domain have attempted to explain entrepreneurs' business performance by examining their EO (Dess and Lumpkin 2005). EO as strategic capabilities to exploit opportunities (Lumpkin and Dess 1996) may enhance the business performance of entrepreneurs (Fuentes-Fuentes et al. 2015). Strategic capabilities are the core competency of the firm that enables it to outperform other firms in the industry (Lin & Tsai, 2016). The management activities bundling and leveraging, driven by EO, are assumed to start from the perception of opportunities and target on the exploitation of these opportunities (Bradley et al. 2011) to unlock competitive advantage leading to a higher firm performance (Miao et al. 2017; Chirico et al., 2011; Sirmon & Hitt, 2003; Sirmon et al., 2007; Sirmon et al., 2011). Past studies have noted that the situation in the external business environments (the frequency of their disruptiveness and vulnerabilities) limit EO strategic decisions (Miller and Friesen 1978). The persistence of disruptions and vulnerability level of business environment (PDVBE) is a common feature of developing countries atmosphere. However, not only entrepreneurial activities driven by EO influence the achievement of resilience. The execution

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⁷ Due to scarcity of literature relating EO to resilience, we considered EO-performance/business success related works-thus performance is referred here as resilience.

of the EO driven activities can be influenced by barriers to access basic agency elements of entrepreneurship i.e. 'a praxis of knowing and doing of anticipating and acting' (Fuller 2000). Women, for example, compared to men, may be hindered by their societal position as it controls most of their activities in society (Guérin 2006; Fletschner and Carter 2008; Roomi and Parrott 2008; Jamali 2009; De Vita et al. 2014). Social norms, in fact, prescribe that women are responsible for domestic activities, e.g. cooking and childcare, and these might restrict their activities outside home (Sekarun and Leong 1992; Ufuk and Özgen 2001; Amine and Staub 2009; Al-Haddad 2010; Singh et al. 2010; Belwal et al. 2012; Maas et al. 2014: see Mozumdar, 2018). Gender being then an indicator of possible societal hindrances to exert entrepreneurial activities.

We believe that by combining in one-model resources, EO, gender, and resilience, this study opens the "black box" of resource usage as mentioned by Bergh et al. (2014) and Sirmon et al. (2007). This research will address several knowledge gaps. Despite EO's theoretical and practical importance for building resilient businesses especially those small and medium enterprises (SMEs)-as they face huge obstacles due to resource deficiencies, research investigating this relationship has been lacking. In fact, EO in the ROT has only recently begun to receive empirical treatments (Maio, et al, 2017). More specifically, sparse researches (Boso et al 2013; Wales et al., 2013) have examined EO to boost firm resilience, especially in a vulnerable business setting. Besides this knowledge gap, this research adds to the insight into resilience defined as a persistent threat (instead of a discrete event) (see in saad et al., 2018).

The strategic orientation of the entrepreneurs takes a crucial role in bundling and leveraging resources. We propose that this manager's strategic role can be expressed in their entrepreneurial orientation (EO). Bundling (i.e., combining resources) and then leveraging (deploying and making proper use of different combinations of resources expressed in capabilities) are strategic acts of entrepreneurs that can be driven by EO to unlock competitive advantage leading to a higher firm performance⁸ (Miao et al. 2017; Chirico et al., 2011; Sirmon & Hitt, 2003; Sirmon et al., 2007). The EO construct encompasses the innovative, proactive, and risk-taking dimensions (Miller, 1983). EO provides direction for how a firm creates more value from scarce resources and thereby fostering a higher level of firm business resilience. The EO (Lumpkin and Dess 1996) driven actions show how firms are able to orchestrate resources i.e. give insight into the process rather than what it does and by that will reflect how entrepreneurs strategically operate their businesses (Wiklund and Shepherd 2005). However, despite EO's theoretical and practical importance for building resilient businesses especially those small and medium enterprises (SMEs)-as they face huge obstacles due to resource deficiencies, research investigating this relationship has been lacking. In fact, EO in the ROT has only recently begun to receive empirical treatments (Maio, et al, 2017). More specifically, sparse researches have examined EO as a key (Boso et al 2013; Wales et al., 2013) fuels for firm business resilience, especially in a vulnerable business setting.

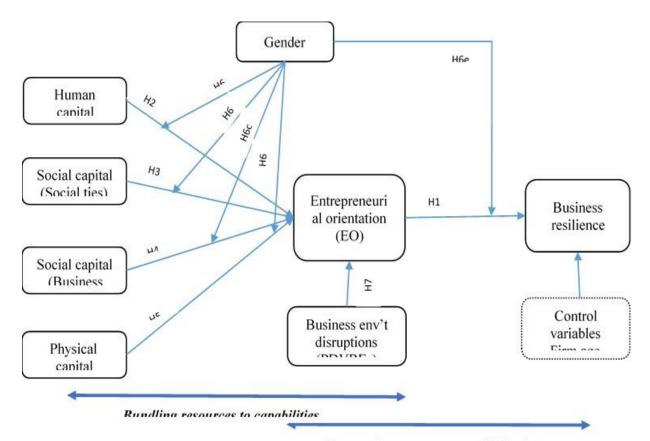
Theory and hypothesis

Overview of the conceptual model

With this research, we open the "black box" (Bergh et al. 2014; Sirmon et al. 2007) of resource usage by emphasizing the role of the entrepreneur in managing the orchestration activities bundling and leveraging. According to resource orchestration theory (ROT), entrepreneurs need to orchestrate their constrained resources to realize firm competitive advantage (Chirico et al.

2011). This theory was developed from the resource-based view, which posits that possessing unique and rare resources is a necessary but insufficient condition (Sirmon, Hitt, and Ireland 2007) for firm value creation processes and resilience. The resource-based view is criticized for neglecting the role of managers/entrepreneurs in recombining, coordinating and deploying resources (Sirmon et al. 2008, Sirmon et al. 2007, Sirmon et al. 2011). The ROT addresses this limitation of the resource-based view and instead proposed managerial actions- bundling and leveraging resources to create value (Miao et al., 2017). While bundling and leveraging actions are generally sequential in nature, each may rely upon another to convert resources into capabilities (Lin and Tsai, 2016). For instance, as a firm uses capability configurations to deploy leveraging strategies, it may need to coordinate the capabilities in an effective and efficient manner- thus, a firm may also use them simultaneously (Boss, 2014). Sirmon et al (2011) and Peuscher (2016) also offer a similar idea, hence, to combine entrepreneurial resources bundling and leveraging actions becomes helpful to understand why firm business resilience differs.

The first step, taken in this research, in opening the 'black box' is investigating the active presence of entrepreneurs in giving direction to the usage of resources: from the acquired resources to achieving business resilience. The presence of the manager/entrepreneur is reflected both in their strategic capabilities signaled by their EO, and their entrepreneurial characteristics to effectuate the strategic direction they foresee. The latter is signaled by the gender of the entrepreneur. The bundling action is interpreted here as the level in which the acquired resources relate to EO. The leveraging action is presented as the level to which resource based EO boosts the business resilience. Gender, signaling entrepreneurial characteristics based on their social position which renders them possibilities and/or constraints to execute management actions, both moderates the relation between acquired resources and EO, and between EO and business resilience. The conceptual model aims at achieving this insight (see Fig 1).



Leveraging resources-canabilities into

Fig 1. Conceptual framework

As Chirico et al. (2011) have noted, a competitive advantage can be realized, when entrepreneurs are able to orchestrate valuable, rare, and inimitable resources that are gained within the firm's environmental context (Lippman and Rumelt 2003, Barney 1991). EO, which involves firm processes, practices, and decision-making activities (Lumpkin and Dess 1996), will enhance firm performance by allowing a firm to make full use of its resources to explore and exploit opportunities (Wiklund and Shepherd 2003, Wiklund and Shepherd 2005). As well, Covin and Slevin (1989) theorized that EO consumes resources and entrepreneur's capability to undertake entrepreneurial practices relies on its resources because resources serve as bases for all organizational actions. Hence, a firm possessing plentiful resources will have a greater ability to form an EO (Miao et al. 2017). This line of reasoning lends support to the notion, as proposed by resource orchestration view, that resources influence how strategies are implemented (Sirmon et al. 2007), which consequently influence firm resilience (Ates and Bititci 2011, Tognazzo et al. 2016). EO is particularly useful for understanding how the in the ROT identified managerial actions bundling and leveraging of resources, are enabled. EO, referring to how entrepreneurially a business managed by owner (Miller, 1983), has been an extensively studied construct for its influence on the firm competitive advantage (Miller 2011; Covin and Wales 2012; Wales et al. 2013; Wales 2016). Two approaches are used to understand and conceptualize EO in the existing literature: a firm and an individual level of conceptualization.

In this study, EO is conceptualized as individual entrepreneurial behaviors and actions. This is because, first, contrary to large firms, small firms can be seen as an extension of their own managers as the owner-managers founded the firm, mobilize resources for business development, and exert their personal influence on the strategic management and direction of the organization. According to the well-known upper echelon theory perspective, an organization's strategic choices and subsequent outcomes are "reflections of the values and cognitive bases of powerful actors in the organization" (Hambrick and Mason 1984). In line with this perspective, EO researchers acknowledge the central role of the individual leader in the organization. Second, most firms in developing countries (which is the context of our study) are small and it is difficult to differentiate the decisions of business owner and organization. Consistent with Miller (1983), most of the literature measured EO with three unique facets—innovativeness, risk-taking, and proactiveness of entrepreneurs-which act together to comprise a gestalt construct.

H1: If entrepreneurial orientation is positively related to acquired resources then EO will positively influence firm business resilience

EO as a mediator between human capital resource-firm business resilience

Human capital is one of the most critical resources that need to mobilize for effective use (Penrose 1959). This resource is typically key for SMEs operating in developing countries (i.e., extremely disruptive environment) because their entrepreneurial activities built around where scarcity of experience and training constraining their firm performance. The human capital which includes, education, experience, and training (Unger et al. 2011), may be a source of resilience as far as they properly bundled and leveraged as suggested by Sirmon et al. (2011) and others. Numerous scholars posited human capital is one of the most critical resources that to be invested to advance entrepreneurial activities (Helfat & Peteraf, 2003; Penrose, 1959; Teece, 1998; Youndt, Snell, Dean, & Lepak, 1996). However, empirical research on the human capital–business success relationship has been mixed: in stark contrast to the results of RBV research (Crook et al. 2008), of 33 studies identified by Newbert (2007), only 11 support the notion that human capital is positively and significantly related to firm performance. One explanation for this contradictory evidence is that the relationship between human capital and firm success can be both direct and indirect (Hitt et al. 2001a), indicating that our understanding of the association of human capital and firm performance remains yet underexplored.

Following EO role of resource orchestration (Miao et al. 2017, Sirmon et al. 2007), we suggest an indirect effect of human capital on firm business resilience (i.e., mediating of EO between human capital and firm business resilience). As per the argument of resource orchestration proponents, possessing resources such as human capital (Sirmon et al. 2007, Sirmon et al. 2011) is important, but not adequate conditions to advance firm resilience. Beyond acquiring resources, there is the need to understand how entrepreneurs orchestrate resources to unlock potential advantage (s) (Miao et al. 2017). This view reflects the traditional concept of strategy which posits that resource position is a starting point where strategy is made (Ates and Bitici 2011, Hitt et al. 2001b). The RBV and its extended resource orchestration view, therefore, lend support to the theoretical conclusion that human capital represents a firm's initial resource endowment that managers may use to mold a firm's strategic orientation (Andrews 1971).

Human capital resources are posited to advance strategic orientation of entrepreneurs (Miller and Friesen 1978). For example, greater education attainment creates an expanded knowledge base, which influences positively the likelihood of innovative behavior (Manev et al. 2005). In addition, education and experience in the entrepreneurship literature widely noted

that it could improve the odds of taking calculated risks in business operation. The development of specific knowledge (e.g., education, experience, and training), as one type of human capital, constitutes a foundation for EO functioning because they provide the basis for EO including developing innovative and proactive business strategies, influencing the quality of decision-making, and improving odds of successful risking taking (Cooper et al. 1989). EO, as one type of strategic orientation, become an essential enabler for building firm resilience capability (Ates and Bititci 2011). The ultimate purpose of EO is to pinpoint which resources are necessary to promote firm business resilience. Hence, EO increases a firm's ability to differentiate necessary resources to innovate (Huang and Wang 2013), thus boosting the likelihood of high firm resilience. Based on the reasons discussed above, we offer the following.

H2: Human capital fuels positively EO resource orchestration role and EO mediates the positive relationship between human capital and firm business resilience.

EO as a mediator between social capital and firm business resilience

Social capital has gained prominence over the last few decades, showing the benefits derived from the firm's position in a social network. In the work of Nahapiet and Ghoshal (1997) social capital or social network defined as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit". Social capital is fundamental to a firm's success since it conduits information, resources, and innovative business idea through various mechanisms (Nichter & Goldmark, 2009). Further, social capital facilitates inter-unit resource exchange and product innovation, the creation of intellectual capital, the formation of new ventures, supplier relations, regional production networks, and inter-firm learning (Adler & Kwon, 2000). Harnessing the social capital, as a strategy to acquire knowledge, allows organizations access to external knowledge, strengthens the willingness and ability of exchange partners, helps in gaining knowledge resources from exchange partners, and thereby enhances the breadth, depth, and efficiency of mutual knowledge exchanges (Biggs, 2011). Particularly for firms operating in resource-scarce, market failures and weak institutional setting (Nichter & Goldmark, 2009), social capital becomes imperative to build strong social capital to search for complementary external resources, to increase information flow, and to establish trust with exchange partners, thus facilitating social exchange and reducing transaction costs (Davidsson & Honig, 2003). Consistent with this, a recent meta-analysis made by Stam, Arzlanian, and Elfring (2014) confirmed that the significant and positive relationship between social capital and firm performance. The finding indicates the existence of a direct relationship of the social capital on the firm performance.

On the other hand, in line with Miao et al. (2017) finding, social capital may also indirectly influence firm performance through EO action (the bundling and leveraging actions). In other words, EO as entrepreneurial strategic posture, representing a propensity to innovate (Covin & Slevin, 1989; De Clercq, Dimov, & Thongpapanl, 2010), may mediate the relationship between social capital and firm resilience. As previously noted the social capital represents the capacity to access resources via social connections (Manev et al., 2005). As a source of firm resources like human capital, social capital may also need to be converted, transformed, and institutionalized into actions (Wright, Clarysse, & Mosey, 2012) to consolidate firm resilience. Like human capital, however, social capital is necessary, but not sufficient, to create competitive advantage leading to above-average returns. Social capital, indicated by high-quality relational resources that reside in interactions among exchange partners, places a firm in a context that is particularly conducive for generating new ideas and knowledge (e.g., EO) (De Clercq et al., 2010), that entrepreneurs may use to mobilize to exploit

opportunities and thus to enhance firm resilience. Further to this, firms operating in the resource constraint environment needs sufficient resources to harness innovative idea and facilitates entrepreneurial experimentation (Covin & Wales, 2012).

As Covin and Slevin (1989) theorized since EO is resource-consuming actions and an entrepreneurial capability to engage in entrepreneurial behavior hinges on its resources (e.g., social capital) because resources afford bases for all organizational actions (Sirmon et al., 2007; Sirmon et al., 2011). Therefore, a firm with ample social capital resources tends to have a greater capacity to undertake proactive, innovative activities and as well willingness to take a risk (i.e., EO), which consequently results in high firm resilience (Ates & Bititci, 2011). It is important to note, however, although social capital may be the conduit through which external knowledge and resources are obtained, this can only occur when entrepreneurs direct social capital for that purpose which is key to resource orchestration (Sirmon et al., 2011). Various classifications of social capital or social networks exist in the literature. Following previous chapter discussion, we classified social capital into the business and social ties. Based on these classifications, we offer the following hypothesis:

H3: Business ties are positively related to EO and EO mediates the positive relationship between business ties and firm business resilience.

H4: Social ties are positively related to EO and EO mediates the positive relationship between social ties and firm resilience.

EO mediates physical capital and firm business resilience relationship

Realizing an entrepreneurial strategy requires diverse resources mobilization and usage (Penrose 1959). Consistent to ROT of (Sirmon et al. 2007), we argue that firms with more physical resources able to implement entrepreneurial-oriented strategies, practices, and decisions better than counterparts. Firms with adequate physical resources do not need to choose strategies that are less than optimal, but cheaper to implement. For example, Tognazzo et al. (2016) asserted that firms that able to mobilize sufficient assets such as technologies and machinery can supports firm to choose strategic options that are more resource demanding, but that ultimately provide greater chances of business success (Nichter and Goldmark 2009). Possessing the right technologies and machinery assist EO effectiveness, which is a resource consuming and demanding activities (Covin and Slevin 1989). Characteristically, most SMEs in developing countries faced difficulties of obtaining physical resources such technologies, that puts severe limits on their growth (Nagler and Naudé 2017, Nichter and Goldmark 2009), this is in contrary to the expectation that these firms supposed to play a crucial role in promoting employment in the context. Mobilizing adequate physical resources to provide SMEs in DCs a chance to exercise and experiment with new strategies and innovative actions that are crucial to promoting firm development. In view of that, bundling and leveraging physical is required to execute and improve entrepreneurial-oriented strategies that can foster the process of creating resilient companies. Thus, we hypothesize that:

H5: Physical capital is positively associated with EO, and EO mediates the relationship between firm physical capital and firm business resilience.

Gender as a moderator

Despite the increase in the number of females' entrepreneur in the last few years, critiques note their entrepreneurial activities are less strategic oriented worldwide (Brush et al. 2009). This is especially a much concern issue in developing countries (De Vita et al. 2014).

Given the important role that females, entrepreneurial play in the setting, understanding gender differential towards EO remain a critical question for policy-makers (De Bruin et al. 2007). The gender differences in EO actions may present, because of the social position of females entrepreneurs in accessing resources in communities (Hansen et al. 2011, Lim and Envick 2013). Of course, the magnitude of societal effect on females-owned entrepreneurial activities varies from society to society (De Bruin et al. 2007). In traditional societies, which is the characteristics of most developing countries, the social and traditional culture constrain women entrepreneurial activities. Women compared to men counterparts are mostly occupied by domestic activities especially in developing countries and thus have less chance to improve and develop their EO's practices and methods. Given these constraints conditions, their entrepreneurial activity is on the rise and female-owned company being one of the fastest growing populations (Brush et al. 2009) in the setting.

The differential in resources orchestration/management among males and females can be examined from two different perspectives (Goktan and Gupta 2015). The first, feminist theory perspective, defines males and females as "essentially different" whereas the second, social constructionist perspective, focuses on masculine and feminine qualities rather than the biological distinction of being males or females (Ahl 2006). Sex, a biological and largely immutable property of individuals, often serves as a highly visible, dichotomous, and ubiquitous marker to categorize people (Ridgeway 2001). Ridgeway put that is why anthropologists have found that sex is a universal attribute used throughout the world to classify individuals as male or female. The social constructionist perspective, on the other hand, focuses on masculinity and femininity. This perspective view that the gender difference qualities of people that are based upon commonly held cultural definitions of male and female. This study considered consider a combination of perspective in defining gender difference in resources leading to variation in EO actions (mobilization and leveraging of resources) among females and males entrepreneurs.

A study argued no gender differences among women and men entrepreneurs about EO possession and practical usage (Goktan and Gupta, 2015). For example, Esnard-Flavius (2010) study showed that women were just as likely to display certain EO competencies as men were. Likewise, Bird's (1993) research confirmed strong similarities between men and women in their desire for autonomy, control, and achievement that are qualities associated with entrepreneurship. However, Cetindamar et al. (2012) pointed to Bird's research, noting the knowledge, skills, competencies, and other attributes relevant to entrepreneurial activities are unevenly distributed across males and females. A study by shinnar et al (2012), reported compared to men, women perceive that they will get less support for entrepreneurial activities, such as receiving cooperation from family members and financing from lenders. Firms owned by females have less able to mobilize physical and human capital than male-owned firms have in many countries (Marlow and Patton 2005). Men and women also differ in the degree of development of their social contacts, which is categorized into business and social ties, in this study (Goktan and Gupta 2015, Runyan et al. 2006, Manolova et al. 2007). The ties in which entrepreneurs are embedded influence their ability to access scarce resources needed to operate and find new business opportunities (Cetindamar et al. 2012). Generally, while prior research widely noted the gender differences in resources and the EO role in mobilizing them (e.g. Shinnar et al. 2012, Brush et al. 2009), this EO difference in relation to resource orchestration, specifically in a resource constraint setting, is less researched (Wales et al., 2013). In addition, female entrepreneurship has been understudied especially in a hostile and resource-constrained environment (Minniti and Naude, 2010). Therefore, we test the assertion that EO resource orchestration is higher among men compared to women in resource-scarce and demanding environment i.e. developing countries like Ethiopia. Thus, we derive the following hypotheses:

H6a: There is a gender difference in the relationship between human capital and EO, and the relationships between human capital and EO are stronger for male entrepreneurs' than female in resource constraint and demanding environment.

H6b: There is a gender difference in the relationship between business ties and EO, and the relationships between business ties and EO are stronger for male entrepreneurs' than female in resource constraint and demanding environment.

H5c: There is a gender difference in the relationship between social ties and EO, and the relationships between social ties and EO are stronger for male entrepreneurs' than female in resource constraint and demanding environment.

H6d: There is a gender difference in the relationship between physical capital and EO, and the relationships between physical capital and EO are stronger for male entrepreneurs' than female in resource constraint and demanding environment.

H6e: There is a gender difference in use of EO and the male entrepreneurs use EO more effectively for fueling firm business resilience compared to a female entrepreneur in resource constraint and demanding environment.

Disruptions and vulnerability of Business environment and EO relationship

EO resource mobilization and usage act are highly dependent on the business environment (Eisenhardt and Schoonhoven 1990). Continually disrupting environment limits firms strategic decisions and practices of EO and thus found a negative relationship between EO and environmental hostility (Miller 1983, Miller and Friesen 1978). A study pointed that the harsh business environment may require a strategic discipline (Porter, 1980) as wrong strategic decisions could even endanger the survival of a firm. The business environment can be characterized by the intensity, frequency and vulnerability level, which may vary from context to context. The effect of the environment on EO performance is more severe in developing countries because the firms in the setting facing frequent and complex disruptions from the environment. This is environment is generally characterized by lack of opportunities and resources. In this study, this nature of the business environment is referred to as persistently disruptive and vulnerable business environments-PDVBEs. Understanding the effect of the PDVBEs on the EO actions becomes crucial to extend the ROT in such a setting since the setting is very much challenging for SMEs due to the continuing trend of disruptions. SMEs in such setting face varied forms of hostile situations threatening their performance and ultimately to their survival (Nichter and Goldmark, 2009).

Firms that operate in highly hostile settings face difficulties in acquiring resources such as physical, financial and human capital (Nichter and Goldmark 2009, Rosenbusch et al. 2013, Wiklund and Shepherd 2005). Such resources are needed to EO pursue entrepreneurial strategies (Rosenbusch et al. 2013). Especially the regulatory and institutional environment in DCs-are notoriously burdensome when compared with that of developed countries—frequently hampers the strategic actions and decisions of entrepreneurs (Nichter and Goldmark 2009). Therefore, for EO to perform well in DCs (i.e., PDVBE), firms need to adopt low-risk taking and experimentation strategic orientation. EO may be an inefficient response to disruptions and instabilities. For example, a firm that engages in a product innovation strategy under the condition of resource-constrained setting may fail because the innovation demands technologies to meet demand (Zahra 1991). As a result, firms in the continually disruptive

setting are expected to exhibit lower EO and, in turn, this can lower their resilience. The above arguments lead to the following hypothesis:

H7: The persistent disruptions and vulnerable business environments (PDVBEs) significantly and negatively influences EO resource bundling and leveraging actions.

Method

Study setting

To test our hypotheses, we used a sample of non-farm SMEs operating in Ethiopia, a developing sub-Saharan African country. Ethiopia offers a suitable research setting, as one of the fast-growing economies, among sub-Saharan African countries, with an average GDP growth of 10.8 between 2004 and 2014-recorded (OECD 2015). Despite such a success story, however, much of the Ethiopian people continue to share the basic characteristics of an impoverished society. Over the last four years (2013 to 2017), the country has seen a substantial, mainly youth-centered political turmoil. There are also risks of spillover of turmoil and conflicts from across Ethiopia's borders challenging businesses. An alarmingly rising youth unemployment has become a big concern for Ethiopia and thus scholars suggest the need to expand SMEs as a potential strategy to absorb these challenges (Nagler & Naudé, 2017; Nichter & Goldmark, 2009). Unquestionably, this has created challenges for SMEs in all sectors and contributed to disruptions that necessitate resilience research. Not only the resource scarcity feature of SMEs in general but also the management of scarce resources, and which specifically very much tough for SMEs in DCs setting such as Ethiopia is also another attention of this research. Considering all these facts, Ethiopia is a useful case example to show how the EO of entrepreneurs contributed to firm resource acquisition and have supported the company's business resilience in a developing economy.

Sample and data collection

The purpose of this study is to examine the EO resource bundling and leveraging capability to strengthen firm resilience for firms operating in a resource scarce and turbulent environment of developing countries. The data for this study generated from non-farm SMEs included in the 2016 (OCSCO⁹ and Wasasa¹⁰) database operating in the East Showa and Arsi provinces in Ethiopia. Sample respondents were chosen based on the systematic random sampling approach. A sample of 408 SMEs were participants of this study. The data collection were undertaken based on the face-to-face interview (mostly administered in the entrepreneurs working place) using survey questionnaires.

Measures

Detail operationalization of the constructs is presented in Table 1, in the Appendix.

Firm business resilience

The construct of business resilience constituted three capability dimensions: firm adaptability, growth (performance increase), and seizing business opportunities in the midst of disruptions (see detail in saad et al., 2018).

Entrepreneurial orientation (EO)

We utilized multiple items to capture the three dimensions of EO (risk-taking, innovativeness, and proactiveness) that conceptualized by Miller (1983). The items are based

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⁹ Oromia credit and saving share company (microfinance bank)

¹⁰ Wasasa micro finance bank

on the work of Covin and Slevin (1989). The adopted items were slightly contextualized to better suit the Ethiopian non-farm SMEs environment- a resource constraint and disruptive business setting. We deployed 11 items scale to measure the three dimensions of the construct. We used seven-point Likert scales, ranging from "1" (strongly disagree) to "7" (strongly agree) to measure all items representing these dimensions.

Human capital resources

The human capital construct comprises three items: educational level, employment and managerial experience possession of entrepreneurs. While the Likert scale measures the educational level, employment and managerial experience measured with dichotomous (No/yes response).

Social capital resources

Various types of social capital calcifications exist in the literature. In this study, two types of social capital (SC) were considered: social and business ties. Following Sheng et al. (2011), the business ties were measured with 3 items, which capture the extent to which firms had established good relationships with other business partners including customers, suppliers, and competitors. Similarly, based on Bekele and Worku (2008), social ties were measured using 2 items, reflecting relationships between entrepreneurs and social supporting groups in the communities. Seven-point Likert scales, ranging from "1" (strongly disagree) to "7" (strongly agree), measured all items.

Physical capital resources

The total assets that a firm owned represented the physical capital resource in this study. The logarithms of the total asset are considered.

Business environments disruptions

Three items measure the persistent disruptions and vulnerability of business environments (PDVBEs). The items were adapted from the World Bank enterprise survey (2013), conducted on non-farm enterprises in developing countries. Seven-point Likert scales, ranging from "1" (very high impediment) to "7" (very low impediment), measured all items.

Moderator Variable

We examine the effect of one moderator variable, the gender of the firm manager, for its effect on the relationship of business resilience and family livelihood performance. The firm manager reported gender. It was coded as a binary/dummy measure, where the female (X=1) and male (X=0).

Control variables

Businesses of different size and age may exhibit different organizational and environmental characteristics, which in turn may influence the firm's EO practices -resource bundling and leveraging actions. Therefore, these variables were included as controls. First, to measure a firm age, respondents were then asked what year their firms were founded, which was used to calculate firm age. The firm age was measured by the logarithm of the number of years since the firm was started. Second, to assess a firm size, respondents were finally asked how many individuals worked in the firm on average each year between 2013-2017, including working owners and part-timers, and to estimate the corresponding full-time equivalent number of employees. The firm size variable was calculated by the average (mean) of the number of employees of the firm (5 years). Hence, this variable was used to control for firm size.

Data analysis

This study employs structural equation modeling (SEM) with partial least squares (PLS). PLS-SEM method was relevant for the present study for three reasons. First, the method allowed us to pursue our research objectives because it was predictive in nature (Hair et al. 2012). Second, it enabled us to observe complex causal relationships (Hair et al. 2012). The model in this study has six constructs (human capital, business ties, social ties, social capital, entrepreneurial orientation (EO), PDVBEs, and business resilience) and their relationships. Additionally, we consider also gender, and control variables (firm age and size). In such scenarios, the model allows researchers to consider different model elements more flexible (Sarstedt et al. 2014) because "PLS is primarily intended for causal predictive analysis in situations of high complexity but low theoretical information" (Jöreskog and Wold 1982). Third, PLS has greater statistical power than common maximum-likelihood covariance-based SEM methods (Reinartz et al. 2009) because PLS is less demanding in terms of the minimum sample size (Henseler et al. 2012). In this study, the sample is small, so the lenient requirements for minimum sample size constitute an additional advantage of PLS. The data analysis used SmartPLS software v. 3.2.7 (Ringle et al. 2015).

Results

To ensure the scales were valid and reliable, we followed the steps proposed by Barclay et al. (1995): (1) Evaluation of the measurement model, and (2) Evaluation of the structural model.

Evaluation of the measurement model

Following Hair et al's (2012) recommendations, the first step was to analyze the factor loadings, composite reliability, and average variance extracted (AVE). Tables 2 present the values for these indicators. All values for these indicators exceeded the thresholds recommended in the literature (Bagozzi et al. 1991, Gefen et al. 2000, Carmines and Zeller 1979, Fornell and Bookstein 1982, Fornell and Larcker 1981). Fornell and Larcker (1981) recommend values greater than 0.5 for the factor loadings, and (Fornell and Bookstein 1982) recommend values greater than 0.7, and 0.5 for the composite reliability and average variance extracted (AVE), respectively, endorsing the reliability and validity of the measures.

Next, we evaluated the discriminant validity of the measures. The discriminant validity test measures the extent to which a construct truly differs from another construct. To test the discriminant validity, we followed two approaches. First, the Fornell and Larcker (1981) criterion are used to test whether the square root of a construct's AVE is higher than the correlations between it and any other construct within the model. Second, the factor loading of an item on its associated construct should be greater than the loading of another non-construct item on that construct. Table 3 shows the result of this analysis and reports the latent variable correlation matrix with the AVE on the diagonal. The illustrated results suggest no evidence of multi co-linearity. Hence, we conclude that the measurement model reveals a good discriminant validity and meets the Fornell and Larcker (1981) criteria. As we see in Table 4, the cross-loadings report is presented in the Appendix. In Table 1, moving across the rows reveals that each item loads higher on its respective construct than on any other construct. The report further verifies discriminant validity.

We also checked if there is a multicollinearity problem by examining the tolerance values (VIF) (Hair et al. 2012). We assured the values are below the threshold value of 5.0

hence indicating no multicollinearity problem among predictor variables (see in Table 5, in Appendix.

We tested the presence of common method variance (CMV) based on the Hermon statistical analysis approach. The test was conducted using SPSS software. To conduct the Hermon statistical analysis- we take all items into exploratory factor analysis (EFA). The test threshold is that the unrotated first factor should be less than 50% (Podsakoff and Organ 1986). We ensured that the CMV is not a problem as the Hermon test value is 39.4%, which is less than 50% threshold. Furthermore, we evaluated model fit using the standardized root means square residual (SRMR) indices. The SRMR is an absolute measure of fit and is defined as the standardized difference between the observed correlation and the predicted correlation (Hair et al., 2012). To complete the analysis of the measurement model, we calculated the goodness of fit of the model using the SRMR (Henseler et al. 2012). The recommended value of SRMR is <0.08 set by Henseler et al. (2012) and we found our model within the threshold (0.078). After verifying the reliability and validity of our measures, in the next section first, we present the results of path relationships in the structural model. Then, the multigroup analysis is conducted to uncover gender differential in EO resource bundling and leveraging in the study context.

Table 2: Items Loading, Internal Consistency, and AVE

Constructs	Items measuring construct	Outer Loadings	Composite reliability	AVE ¹¹
Business resilience	AD1	0.82	0.95	0.64
construct	AD2	0.82		
	AD3	0.75		
	AD4	0.81		
	Opp1	0.82		
	Opp2	0.86		
	Opp3	0.79		
	P1	0.76		
	P2	0.79		
	P3	0.76		
	P4	0.82		
Entrepreneurial	EO_I1	0.80	0.95	0.64
orientation (EO)	EO_I2	0.75		
	EO_I3	0.84		
	EO_I4	0.78		
	EO_P1	0.80		
	EO_P2	0.83		
	EO_P3	0.80		
	EO_R1	0.81		
	EO_R2	0.78		
	EO_R3	0.81		
Human capital resources	Educational level	0.79	0.75	0.5
	Employment experience	0.66		
	Managerial experience	0.67		
Physical capital resources	Investment (log)	1.00	1	1
Social capital resources	With ROSCA ¹²	0.75	0.73	0.58
Social Ties	With other local cooperatives &	0.77		
	associations			
Business Ties	With suppliers	0.91		0.02
	With customers	0.91	0.94	0.83
	With other firms/competitors	0.91		
Business env't disruptions	Lack of supporting	0.55		
(PDVBE)	institutions/institutional voids	0.55		
(12.20)	Infrastructural hurdles	0.75	0.76	0.52
	Market access-related challenges	0.83		

¹¹ AVE = average variance extracted.

¹² Rotating savings and credit association (ROSCA)which is also named in Ethiopia as 'Iqquib'

 Table 3. Fornell-Larcker Criterion - Discriminant Validity (for constructs)

Constructs	Business env't Disruptions (PDVBEs)	Entrepreneurial Orientation (EO)	Human capital resources	Physical capital resources	SMEs business resilience	Social capital resources (Business ties)	Social capital resources (Social ties)
Business env't disruptions (PDVBEs)	0.72	-					
Entrepreneurial orientation (EO)	-0.23	0.80	-				
Human capital resources	-0.18	0.36	0.71	-			
Physical capital resources	-0.26	0.38	0.29	1.00	-		
SMEs business resilience	-0.20	0.61	0.28	0.36	0.80	-	
Social capital resources (Business ties)	-0.08	0.54	0.23	0.24	0.56	0.91	-
Social capital resources (Social ties)	-0.19	0.32	0.14	0.23	0.36	0.42	0.76



Table 6: Path Coefficients and Significance Testing

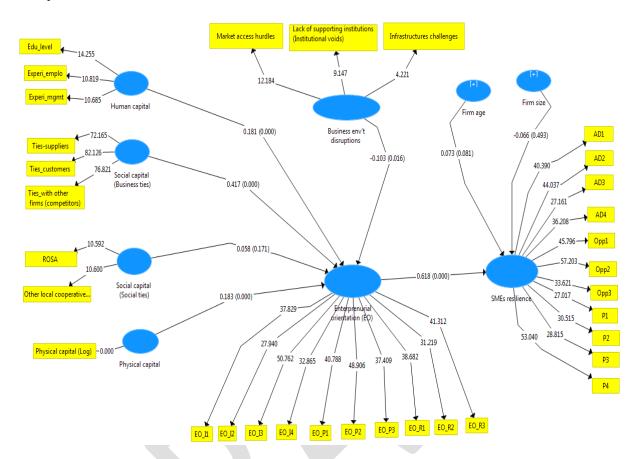
Hypothesis	Path	Path coefficie nts	S.D	T-values	Decisions	\mathbb{R}^2
Control variable	Firm age -> SMEs business resilience	0.074	0.039	1.884*	-	38
Control variable	Firm size -> SMEs business resilience	-0.037	0.094	0.698	-	
H1	Entrepreneurial orientation (EO) -> SMEs business resilience	0.614	0.04	15.486**	Supported	
H2	Human capital -> Entrepreneurial orientation (EO)	0.186	0.04	4.536***	Supported	40
Н3	Social capital (Business ties) -> Entrepreneurial orientation (EO)	0.415	0.042	9.95***	Supported	
H4	Social capital (Social ties) -> Entrepreneurial orientation (EO)	0.062	0.042	1.394	Not supported	
Н5	Physical capital -> Entrepreneurial orientation (EO)	0.181	0.041	4.487***	Supported	
Н7	Business env't disruptions -> Entrepreneurial orientation (EO)	-0.108	0.041	2.53**	Supported	

*** p< 0.01, t value > 2.327; **p < 0.05, t value > 1.645; and *p < 0.1, t value > 1.282

PLS Structural Equation Model Analysis

Figure 2 presents the visual representation of the structural equation model results while Table 6 shows detailed results of the relationships between variables, path coefficients, S.D, t-values, decision, and R-squared. The significance of the path coefficients was determined via a bootstrapping procedure, where the sample size was increased to 500. The results show the presence of a positive and statistically significant relationship between the human capital (t value=4.536, P=0.000), social capital (business ties, t value=9.95 p=0.000), and physical capital (t value=4.487, p=0.000) resources, and the EO. Thus, hypothesis H2, H3, and H5 are supported. Our results provide support for Hypothesis 1- the relationship between EO and SMEs business resilience (t value-15.486, p=0.000) is positive and statistically significant. The results did not support the hypothesis 4, the relationship between social ties (t value=1.394, p=0.171) and EO is not significant. Moreover, results also suggested that the level of business environment disruptions-PDVBEs (t value=2.53, p=0.016), is statistically significant and negatively related to EO resource bundling and leveraging actions and practices in the context.

Figure 2 summarizes the findings from applying the PLS structural equation model analysis so far.



Multigroup Analysis

A multi-group analysis follows the testing of the structural model. Using the multigroup analysis, our next step is to investigate if there is a gender differential present in EO resources bundling and leveraging actions between female and male entrepreneurs in the study context. In PLS-SEM, the measure of the difference between different groups was interpreted based on the comparison of path estimates between the groups (Lee et al., 2014; David Garson, 2016). In some cases, however, even small differences in coefficients show a significant value. Therefore, identification of the distance between coefficients is recommended (David Garson, 2016). There are three methods (Sarstedt et al. 2014) of the testing the significance of differences (i.e., PLS-MGA, Parametric, and Welch-Satterthwait tests). While the PLS-MGA is non-parametric significance test; the Parametric Test is a similar method to PLS_MGA but is parametric, assuming that groups have equal variances. The Welch-Satterthwait test is an alternative parametric test, assuming unequal variances between groups. It is noted that compared to others (Sarstedt et al. 2011) the PLS-MGA is the most conservative and often used test and thus, we adopted for this study to compare gender differential. According to this test a difference to be significant if the p-value is smaller than 0.05 or larger than 0.95 for the difference of group-specific path coefficients (Sarstedt et al. 2011). This method (see Henseler et al. (2009)) is an extension of the original nonparametric Henseler's MGA method as described, for example, by Sarstedt et al., 2011, and is the most commonly used test. The results are presented in Table 7 below.

Table 7. Path Estimates of Gender Differences in Relationships between the Influence of Different Types of resources to EO and EO to business resilience

		Path Coefficients (standardized values)		T-Values		Path coefficients comparison	PLS-MGA test		Decision
Hypothesis	Path	Females (N=201)	Males (N=207)	Females (N=201)	Males (N=207)	results	Path Coefficients- difference (F - M)	p-Value (F vs M)	
Н6а	Human capital -> Entrepreneurial orientation (EO)	0.239	0.139	3.974***	2.167**	F>M	0.113	0.083	Supported at p<0.1
Н6ь	Social capital (Business ties) -> Entrepreneurial orientation (EO)	0.424	0.389	7.338***	6.176**	F>M	0.034	0.349	Not supported
Н6с	Social capital (Social ties) -> Entrepreneurial orientation (EO)	0.123	-0.024	2.028**	0.445	Male NS	0.147	0.047	Supported
H6d	Physical capital -> Entrepreneurial orientation (EO)	0.097	0.237	1.767*	4.421**	M>F	0.138	0.953	Supported
Н6е	Entrepreneurial orientation (EO) - > SMEs business resilience	0.635	0.497	13.75***	8.2***	F>M	0.128	0.048	Supported

Note: M=Males, F=Females, NS=Not significant. P values in italics indicate difference in significance. * p< 0.1; ** p< 0.05; *** p< 0.01.

Examining the p-value columns, the difference is significant in three relationship—namely human capital (at p<0.1) and social ties (at p<0.05) to EO, and EO (at p<0.05) to business resilience.

Therefore, the significant differences confirm hypotheses H6a, H6c, and H6e. As per this test, the physical capital (at p>0.95) to EO is found significant differences. In contrarily, the business ties relationships with EO show no significant relationship among the gender of entrepreneurs though female entrepreneurs seem doing well compared to male counterparts. This multigroup gender differential analysis shows that in the study context females entrepreneur more able to mobilize human capital and social ties resources as compared to male counterparts. They also found in a better position in EO and business resilience relationship, meaning that female entrepreneurs more EO oriented and resource orchestrator despite facing more disruptive environments. Hence, policymakers have to give due attention to capacitating females entrepreneur through human capital and facilitate ways they can more optimize societies for their business activities in the setting. The result presented in Table 7 note male are more able to mobilize a physical resource, which coincides expectation in traditional societies. In traditional societies such as Ethiopia, the law systematically discriminates female ownership of physical resources such as land in rural areas.

Discussion

Our study was motivated by the desire to investigate the business resilience of SMEs by extending the resource orchestration view proposed Sirmon et al. (2007, 2011) via EO theory in a resource-constrained setting. Hence, we tested a model in which EO mediates the relationship between firms various types of resources and firm business resilience. In doing so, we regard EO as the mobilizing vision to create competitive advantage (Chirico et al., 2011) as evidenced by above-average business resilience. Specifically, we found that the EO resource bundling and leveraging actions mediate the relationship between resources and firm business resilience and that these mediation effects account for at least part of the previously reported inconsistent results. Considering EO as instrumental for entrepreneurs' resource bundling and leveraging actions, we seek to provide a more complete model of conditions affecting SMEs ability to overcome disruptive situations and thereby become more business resilient. In particular, and consistent with Lumpkin and Dess (1996), we consider EO to be "a system of practices and managerial styles that offer direction for the use of resources" (Chirico et al., 2011: 310). This study advances the idea that entrepreneurial resources bundling and leveraging via EO is a force to fill the missing link between resources and firm resilience. We made contributed to an effort to open the black box and addressed the gap in the literature on what makes firm resilience differ.

To provide a methodological contribution, we employ smart PLS_SEM to test our mediated model. Using PLS we were able to not only assess individual elements of our model but to also assess the mediating relationships proposed in our model. Further, PLS_SEM allowed us to include effect sizes to control for other variables, compare mediation models against one another and maximizing external validity (Bergh et al., 2014; Shadish et al., 2002). We also examined the robustness of our results through various techniques (model fit, R square, reliability and validity, discriminant analysis, and the multicollinearity (VIF) as recommended by Hair et al (2012). Thus, we are able to provide an early test of a full resource orchestration model with the aim of extending the PLS_SEM methodology to strategic management research and thereby contribute to "the ongoing stream of methodological inquiry in strategy research" (Wiersema & Bowen, 2009: 688).

We also aim to advance our understanding of gender difference in EO research (e.g., Kreiser et al., 2010; Saeed et al., 2014) by examining how resource bundling and leveraging action of EO vary as a function of gender dimensions. Thus, we deployed PLS-SEM multigroup analysis to explore the

difference and thus contributed to the advancement of the approach in the general entrepreneurship and SMEs literature.

Theoretical implications

Resilience in business theme has attracted an explosion of research attention that has primarily focused upon how to create resilient small and medium enterprises (SMEs) in the midst of increasing, persistent and complex disruptions and companies typically small businesses vulnerabilities due to their resource-constrained and scarcity of resources. This is the phenomenon of most SMEs in developing countries. While previous research has demonstrated what the relationships are between various resources and firm resilience (Ates and Bititci, 2011), there has been lack of understanding of how resources mobilized and deployed to achieve a higher level of business resilience. For example, prior empirical research has done little to examine the role of EO in resource mobilizing and leveraging to sustain firm resilience. Specifically, to date, no research on resilience has taken account of the extreme disruptive situation pressuring the EO actions, a phenomenon of the business environment in developing countries. This study contributed to fill this gap and thus advanced theoretical understanding of the resilience concept in varied environments.

These analyses of various resources influencing EO and EO leveraging to create value from diverse resources may also have implications for the more fine-grained understanding of what the relationships are between resources and firm resilience. We extend this research by building upon recent developments in the resource-based view of the firm and related constructs to identify an analytical framework appropriate for the SME in developing countries context. By using resilience, resource orchestration, and entrepreneurial orientation theoretical frameworks, this provides a systematic means to identify challenges of mobilizing and using scarce resources and enables us to identify potential strategies to achieve these challenges and thereby achieving SMEs resilience

Practical implications

As we have noted, one way to orchestrate resources is advancing EO as it helps to establish the linkage between scarce resources available and resilience of the companies desired. In light of this view, this study has three important practical implications for entrepreneurs. First, firm resources, such as human capital, social capital (i.e., business ties), and physical capital, provide critical bases for entrepreneurial activities. Entrepreneurs should consider constantly renewing and enhancing their EO to sustain the optimal level of their firm's resources. Second, policymakers and practitioners should provide a capacity building work through training and experience sharing to develop EO's of entrepreneurs to maximize the utility of resources for building resilient companies because resources cannot generate competitive advantage unless they are deployed efficiently as suggested by Sirmon et al (2007, 2011). Third, we found a gender difference in EO resources' bundling (human capital, social ties, and physical capital) and leveraging (i.e., efficient deployment action) that may lead to variation in firm resilience. Typically, policymakers' investment to upgrade EO resource leveraging capability of females' entrepreneurs is a relevant direction to enhance their firm resilience endeavors.

Limitations and future research

Like all papers, this one is no exception in having limitations that provide scope for future research with respect to resource orchestration processes. For example, how EO behave in different context and time may vary. The contextual understanding of EO resource orchestration in different environment needs attention. Thus, more research is needed to understand how different context and

time influence EO importance. This research has not fully identified the resource orchestration processes to achieve firm competitiveness and resilience. It is believed that there are still some missing links between resources possession and resource exploitation to fully capture the inside black box-why firm resilience differs. This is mainly due to the limitation of the available data. With respect to the breadth of resource orchestration, further research is needed to understand EO action, for example, we still need to know more about nature of resource synchronization as stated by Sirmon et al (2011). We call for more researches that are empirical on further resource orchestration stages to broaden our understanding of the relationship between resources and firm business resilience. Methodologically, to enlighten our understanding of resource bundling and leveraging from various angle, more researches are needed that use other research methods such as a case study, focus group discussion and longitudinal survey analysis.

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SBI BEST PRACTICES

The "Idea Factory"- A Full-Featured Student Startup Resource Center

Ken Klotz, Bradley University

Students have a lot of ideas, some great- others not. The frustration is in seeing a great idea fail to result in the launch of a venture because a student does not know exactly how to take the next step. Universities often create entrepreneurial excitement by conducting competitions or hosting events, but fail to provide enough guidance afterwards to help students continue on their entrepreneurial journey. The Turner School of Entrepreneurship and Innovation at Bradley University has addressed this problem by creating the "Idea Factory" as the "hub" of entrepreneurial activity on campus. The Idea Factory provides a structure to link together what seems to be disconnected curricular and co-curricular entrepreneurship opportunities.

At the Idea Factory, we are all about execution on ideas. But, a one size fits all solution will not work, as every student finds themselves in a different place on the venture launch spectrum. A customized approach is thus needed, which is the main purpose of the Idea Factory. More than just a physical workspace, the Idea Factory will "triage" a student entrepreneur to determine which programs or activities will be best suited to move them forward.

If the student has just a germ of an idea for a venture or is merely exploring the entrepreneurship space, they will likely be introduced to our Brave Pitch Competition where they give a 3-minute elevator pitch. Also that student will be encouraged to hang out in the Idea Factory incubator space to be around other student entrepreneurs. Perhaps they will choose to join a team that is developing another student's idea. Finally, to provide excitement, the student will be encouraged to attend our Distinguished Entrepreneur Speaker Series where accomplished founders of companies like Priceline, Redbox, or UGG Footwear share their startup stories.

For a student who has an idea and is serious about exploring it, we may suggest frequent connection with the Idea Factory incubator where staff can help them set milestones, or where they can find teammates with skills different from their own. To provide an exciting goal we will likely suggest they compete in the "Big Idea Competition"- a 3-round competition featuring a trade show, elevator pitch, and \$20,000 in cash prizes. For students developing a product, we will connect them with makerspace equipment and tools to create working prototypes or to test their idea.

Students who are ready to launch a venture will likely be directed to the "Brave Launch" Programan accelerator-style, multiple week program where students perform customer discovery, create a compelling value proposition, and hone presentation skills while entering the marketplace. To fill knowledge gaps, this type of student will be matched with an industry or functional area mentor through our Bradley Alumni Entrepreneur Network. Finally, they will be given introductions to angel investors and/or bankers for potential funding.

Through the Idea Factory's customized, concierge-type guidance system, student entrepreneurs will no longer feel lost in a sea of programs and activities without a compass to guide them.

Connecting Mentors with Student and Faculty Entrepreneurs: A Regional Approach

Dennis Barber III, East Carolina University Michael Harris, East Carolina University

Accredited by the Association to Advance Collegiate Schools of Business (AACSB) since 1967, the East Carolina University (ECU) College of Business is the largest business school in North Carolina, with approximately 4200 undergraduate and 1000 graduate students. Housed in the College of Business, the Miller School of Entrepreneurship was established in 2015 and is the only named school of entrepreneurship in North Carolina. The Miller School serves as a regional hub for preparing students to take an entrepreneurial mindset and skillset into their communities. In addition to its unique entrepreneurship curriculum, the School links with key strategic partners to offer co-curricular programs that help serve as a catalyst for regional transformation. The goals of the Miller School are to attract innovative students and help them reach their entrepreneurial potential and assist with regional transformation through a comprehensive entrepreneurial ecosystem developed with key campus and regional partners. Through these partnerships, we hope to increase experiential learning opportunities for our students and to encourage interaction between the community and our students. We believe these student experiences are a driver for local economic development.

The Miller School is launching a new BS Entrepreneurship degree in Fall 2019 and currently has a certificate program available for any undergraduate student. Some of the key co-curricular initiatives include the Pirate Entrepreneurship Challenge, Horizon Entrepreneurial Living-Learning Community, Summer Innovation Academy, and the NSF-funded I-Corps program. They are designed to provide opportunities for both innovative students and faculty on campus.

As we developed these programs it was critical to design an effective system to connect our students and faculty with seasoned mentors to provide the needed industry connections to understand the commercialization process. As such, we have developed four regional advisory councils throughout our state to connect with our most successful entrepreneurial alumni. These alumni are strategically located in Greenville, Raleigh, Wilmington, and Charlotte to ensure statewide coverage. Each councils has an elected chair who coordinates mentoring and classroom requests. These four chairs constitute our executive board tasked with strategic planning for the Miller School.

We have engaged with our council members in multiple ways to link them with our students. They often serve as guest speakers in our courses, and have helped mentor student teams in our upper-level experiential classes. We have multiple courses, including the SBI and Family Business, working with actual business clients. In addition, our Entrepreneurship course features an opportunity for students to pitch their own business ideas to select members at the end of each semester. These entrepreneurs provide invaluable expertise to help our students better understand the ideation and launch processes.

In addition, we provide mentor opportunities for all students in the Pirate Challenge, our signature pitch competition, and Horizons, our new Living-Learning Community for entrepreneurial students. Any of these students can select members of our advisory councils to help them better develop their business concept and refine their communication skills as they pitch in the competition, and for potential investors in the future. The Challenge takes place over the full academic year with multiple round, and student teams are strategically connected with mentors as they advance through the competition.

As we further develop launch opportunities for our students in the Miller School we are simultaneously working to develop a Pirate Fund that can provide seed capital to our students as they graduate. Many of these students will either complete our degree or certificate programs, and/or participate in the Pirate Challenge. Our advisory council members play a key role in fundraising and helping make decisions about funding priorities. In the past two years we have had approximately 140 student teams in our programs with innovative ideas and the hopes of launching a venture. These emerging entrepreneurs need specialized mentoring to advance their concepts to the launch stage, with a focus on creating a system that promotes sustainability.

Our advisory council members are also linked with faculty members in our I-Corps program (https://icorps.ecu.edu/about/). These faculty come from various units across the campus with innovative ideas, but need to learn the commercialization process. A critical part of a successful I-Corps program is developing relationships with industry experts, particularly ones with startup experience. A university priority is to increase faculty innovation and commercialization opportunities and these regional councils are embedded in a manner to help achieve this goal.

Another high impact interaction, for the students, that we have had with our regional council members is the site visits. Starting in the Fall semester of 2018, we took groups of students to visit with regional advisory council members. These events included influential entrepreneurial alumni speakers and tours of successful ventures. In the academic year 2017-2018, we had events in Wilmington, Raleigh and Greenville, NC. We are in the process of planning a visit to Charlotte during the Fall 2018 semester. As part of our efforts to increase experiential learning opportunities for the students, we gave three students on each trip the opportunity to pitch their ideas (or businesses) in front of the advisory councils. After the pitch, the council members asked questions and interacted with the students. Most of the pitches ended with the advisory council members providing clear guidance on how the students could proceed.

As the Miller School continues to build the size and competencies with these four regions we are also planning with the hopes of launching new regional councils in Atlanta and Richmond. Coverage in these new regions allows for an even greater connection across the southeast. Our graduates predominately reside in these geographical areas and having active advisory councils can provide critical networks and access to capital (social and financial) for our nascent entrepreneurs. Together, our programs and extensive mentoring networks comprise an ecosystem that creates a competitive advantage and experiential learning opportunities for our graduates.

IntersectLA Solving Business Challenges Through Creative Strategy and Collaboration

Joe Bautista, California State University, Northridge

From entrepreneurial startups to large tech companies, businesses have seen a growth in the number of creative thinkers and collaborators that they seek to employ. Industries, products, and services are realizing the power of creative strategy and collaboration to develop unique and unified communications through all their consumer or user touchpoints. For over 10 years at California State University, Northridge, a public university north of Los Angeles, students have been innovating and evolving through a high-impact academic center that mentors and advances students to meet these business and industry needs.

IntersectLA, formerly The Center for Visual Communication (VISCOM) and RADIUS 2.0, is an on-campus collaboration of creative strategists. Through proven branding and design thinking methodologies, they work together to solve challenges and add value for businesses, organizations, and communities. The team is comprised of a multidisciplinary group of talented, passionate learners and educators who believe in their capacity to advance and change the world. With capabilities that span all traditional and digital media, they provide creative strategy services for regional, national, and global organizations. IntersectLA brings together students, faculty, and industry professionals who work together on real-world projects and activities to support education and career preparation.

Their name reflects the objective to "intersect" and leverage the diverse student population at CSUN who work in research and creative fields, often separated by the traditional college and departmental silos. Students from various backgrounds and areas of study are purposefully placed in teams to collaborate on project-based client work or develop entrepreneurial business start-ups through sponsorship. In this past year alone, IntersectLA collaborated on projects with faculty and students in the areas of Art, Design, User Experience, English, Psychology, Marketing, Management, Computer Science, Mechanical Engineering, Journalism, Cinema and Television Arts, Theatre, Music, Economics, and many more. All projects generate revenue to help support the center and provide financial resources for the student and faculty teams.

This presentation provides project case studies and insight on how a multidisciplinary center can thrive by utilizing research based methods and data-driven creativity to develop strategy and solve business challenges for clients in need of advancing their initiatives, organizations, or brands.

Capitalizing on Wondering Minds – Using Recycled Materials to Create Interactive Mind Mapping Approach to Motivate Service Learning in Entrepreneurship

Kathleen Liang, North Carolina Agricultural and Technical State University

Abstract

Mid mapping is a popular method to help people organize thoughts beyond note taking. This presentation will share an effective, interactive mind-mapping approach designed and implemented by the presenter over 20 years to engage students and clients (entrepreneurs and entrepreneurs-want-to-be) at various stages of contacts in a dynamic service-learning environment. In 15-20 minutes, we will go through hands-on activities to simulate this innovative mind-mapping technique using recycled materials. This exercise are applicable in classroom or non-classroom environment given any size of service-learning classes. Since 1998, the presenter has introduced and conducted this exercise with more than 10,000 individuals while teaching service learning and entrepreneurship to both academic and non-academic audiences across various age, gender, education, background, geographical location, and work experience.

Introduction

One of the most challenging aspects of service-learning curriculum is finding an effective way to connect students with clients. Instructors often identify clients through requests of proposals, personal and professional networks, or random referrals. The theory of service learning emphasizes on reciprocal learning exchanges between students and clients, while collaborating on providing services to fulfill the needs of clients. Since students and clients could have various expectations and presumptions of the process, we often find conflicting interests, arguments, and lack of participations throughout the service-learning journey.

Many educators in entrepreneurship and small business disciplines adopt service-learning curriculum to encourage hands-on training for students to work with a variety of clients. For example, some entrepreneurs might need help to design and develop new advertising materials, and others might be looking into creating new hiring policies. Research have proved that most entrepreneurs and entrepreneurs-want-to-be have unique characteristics such as wanting to take control, willingness to take risks, and being their own boss. These entrepreneurial characteristics are more likely to intimidate students who might not be as well prepared in participating in the service-learning agreements. There is very limited research-based evidence to support educators to initiate and foster positive service-learning relationships for students and clients to work with each other in a trustworthy, confident, and comfortable manner. Mind mapping seems to be one approach that could support both students and clients in various stages of collaboration to ease into the working relationship, to communicate effectively beyond words, and to exchange information guided by funfilled activities. What is even better is that, we do not need to rely on phones, tablets, computers, papers, pen/pencils, or any note-taking technique to design and deliver the most effective mindmapping activities. All we need is recycled material around us! This exercise works really well in the initial meeting between students and client.

Summary of Interactive Mind Mapping Approach Using Recycled Materials

- Step 1. Instructor identifies one goal for a service-learning team based on client's need
- Step 2. Instructor gathers and provides recycled materials paper, cereal box, water bottle, packaging materials, plastic container, etc. You may provide markers, glue, or other supplies if necessary.
- Step 3. Each member in one service-learning team chooses one particular recycled material to 'make one thing' that would describe or lead to achieving the goal of the team. Each person may change or manipulate this material's form, shape, or structure. Each member must work individually and independently, no communication or no contact with other team members. (5-10 minutes depending on complexity of the design and construction related to the goal) Focus individual creativity.
- Step 4. Each member spends 1-2 minutes to explain to the team what she or he has made in Step 3, and how this subject relates to the goal. Focus presentation and communication skills, listening skills.
- Step 5. After each member presents different subjects, each member must find a partner in the team to 'combine' their subjects to create a new 'subject' that would lead to 'the best approach to achieve the goal'. Then each pair presents to the team about the 'combined subject', and ask for feedback and clarification. In this step, each team member may not change the original component, design, or structure of their own subject created in Step 3. This means, two members must find a way to combine, link, overlap, or insert two different subjects together that will become one new subject to achieve the goal. Each pair uses 2-3 minutes to explain how they design and create this new subject, and why it is the best approach to achieve the goal. (5-10 minutes for each pair to complete new subject and to explain) Focus transition and combine individual creativity to build partnership; communication skills; listening skills
- Step 6. All team members work together to 'combine' all subjects created by pairs to make one new 'subject' that would serve the best purpose and represent the best approach to reach the goal. In this step, each pair may not change the component, design, or structure of their subject created in Step 5. The key is to encourage the whole team to carefully consider, review, and assess all subjects created in Step 5 before they decide what to do with different subjects. Ask the team to explain and justify (1) specific strategies to combine all subjects together, and how they make decisions together; (2) conflicting interests, challenging communication, and negotiation and agreement among all members; and (3) final decisions and potential deviations from the goal. Focus transforming and adding small group power; team building; holistic understanding; negotiation; assessment skills; professionalism; respect; achieving goal in a timely manner.
- Step 7. Client and students reflect on this exercise and their experiences working together. Team members create a mutually agreed mind map step-by-step guided by their own learning and working styles to achieve a goal that will be comfortable, reasonable, and effective for their own team.

Conferences and Workshops for the Integral Formation of the Student

Judith Banda, Universidad De Guanajuato

Justification of the Best Practices

University of Guanajuato in Mexico, through the System of Higher Education in 2020, proposes that the Institutions focus their attention on the integral formation of their students, design multidisciplinary programs and develop their teaching activities using learnign innovator models that allow them to achieve academic quality and meet social needs.

UG is open to intercultural dialogue, considers that internationalization is fundamental for the intercultural process because it implies appreciation for their own culture and knowledge, tolerance and respect for other people, cultures and values.

The new Educational Model that has been operating since 2016, the areas of organization of the curricular contents are divided in four areas: basic area, propedeutic area, complementary area and general area. The two areas of interest for best practices are: complementary area which includes disciplinary complementary training and the general area that strengthens the development of the competencies that should characterize all people graduated from the University of Guanajuato.

The sub-areas suggested to organize the general area:

Subár	eas sugeridas	Descripción
Cultural training		Appreciation for diverse expressions of culture and art, as well as for intercultural activities that promote a positive vision of cultural diversity and heterogeneity.
Creativity spirit	and entrepreneurial	creativity means the ability to find original and satisfactory solutions to a given problem in a given context. For its part, the entrepreneurial spirit contemplates the development of projects on its own initiative, always considering its social dimension.
Personal de	veionmeni	Activities that promote the emotional and physical well-being of the student.
Social respo	ncanility	Recognition of the impact of personal decisions on society to promote sustainable human development.

Collaboration between Authors of Today's Inspired Latinas, Entrepreneurs and consultors

To support these two new curricular areas. Since 2014, I started to organize workshops and conferences monthly with the support of the dean and a student group, it in colaboration with Authors of Today's Inspired Latinas, Entrepreneurs and consultors. With these activities we help the students to their integral formation.

Workshops and Conferences in 2016

Conference, workshop or activity	Nacional or International	Curricular Area	Number Students
Discover your Passion	International	Personal Development	400
Project Valuation	National	Entrepreneurial Spirit	90
Workshop: Leaderships	National	Entrepreneurial Spirit	30
Living together with children	National	Social Responsability	40
Wealth Formula	International	Entrepreneurial Spirit	90
Sharpen your Business sense	National	Entrepreneurial Spirit	60
Workshop: Leading by amending the broken	International	Personal Development	80
Workshop: Love yourself	International	Personal Development	100
Make your heart sound	International	Personal Development	380

Workshops and Conferences in 2017

Conference, workshop or activity	Nacional or International	Curricular Area	Number Students
The size of your context will generate wealth	National	Personal Development	100
Banking in the United States and the Challenges for a Latino in the Capital Markets World	International	Entrepreneurial Spirit	90
he Entrepreneurs and the Economic Development of Salamanca, México	National	Entrepreneurial Spirit	70
Living together with children	National	Social Responsability	40

Giving a Refresh	National	Personal Development	80
Project Valuation	International	Complementary Area	60
Presentation of the	National	Cultural Training	60
Book: Bailarinas de			
Guanajuato			
5 habits to achieve	National	Personal Development	70
success			
Give meaning to your	National	Personal Development	350
life			
Sell, sell yourself	Nacional	Complementary Area	350
Workshop: Do you	International	Personal Development	
want to have balance			
in your life? Spiritual,			
mental, personal,			
physical			
Workshop of Pitch	National	Complementary Area	20
PNL to sales	National	Complementary and	70
		Entrepreneurial Spirit	
Coaching to	National	Complementary and	70
negotiation and sales		Entrepreneurial Spirit	

Workshops and Conferences in 2018

Conference, workshop or activity	Nacional or International	Curricular Area	Number Students
Electronic Invoicing 3.3.	National	Complementary Area	100
Inovate already	National	Entrepreneurial Spirit	90
Reading Circles	National	Cultural Trainign	30
Living together with children	National	Social Responsability	40
Great Event: Empréndete, Empodérate y Transfórmate 3 Conferences and 9 different workshops	International	Complementary Area Entrepreneurial Spirit Cultural Training Personal Development Social Responsability	500

SBDC BEST PRACTICES

Best Practices of SBDC's with Host Institutions

Jennifer Irvin, Texas State University Jana Minifie, Texas State University Bill Thompson, Texas State University Dennis Smart, Texas State University

Abstract

Per America's Small Business Develop Center (ASBDC) (https://americassbdc.org/about-us/a-briefhistory/, n.d.), the exact genesis of the Small Business Develop Center (SBDC) is difficult to pinpoint as the concept has evolved over the years. In the 1940s, university-based business extension was introduced by Congress. This was followed by legislation in 1953, forming the Small Business Administration (SBA). This action recognized the importance of small businesses to the nation's economy and that support by our federal government was needed for the success of small businesses. In 1975, William C. Flewellen, Jr., Dean of the College of Business Administration at the University of Georgia and Reed Powell, of the California State Polytechnic University at Pomona, approached the SBA stating that "...the nation as a whole – would benefit from a small business program that offered the resources of higher education, small business and government." From this, the University Business Development Center (UBDC) program was announced during the 1976 Small Business Week activities. Due to the benefits of the UBDC program, the SBDC went into law in 1980. SBDC centers were formed to have a partnership with the SBA, state governments, and a host college or university institution. There are 64 lead SBDC service centers (with 4 being in Texas) in the United States, the District of Columbia, Puerto Rico, the Virgin Islands, and American Samoa. SBDC centers offer assistance to entrepreneurs and small businesses in areas of marketing and business strategy, finance, engineering, management, and other areas. (Congressional Research *Service*, 2017)

All of the areas of support offered by SBDC centers are commonly taught subjects by college or university. Secondary research was conducted to determine as to what "resources" from the host college or university were being utilized to assist small businesses. Research was found with regard to experiential learning (Cook, Belliveau, & Campbell, 2016; Geho & McDowell, 2015; Kosnick, Tingle, & Blanton, 2013; Cook, Campbell & Kopp, 2013), with specific course work (Minifie, 2018), and with specific type of clients. Informal interviews with select SBDC Directors determined that there wasn't a consistent or suggested best practices of SBDC centers with their host institutions. In fact, from this very small sample of personal interviews with SBDC directors, it was determined that the interaction of SBDC centers with their host institutions varied greatly.

In recent years, the funding of SBDC centers has not kept up with inflation and in some cases financial support of SBDC centers has decreased. In order to maintain the same level of commitment to their clients, have SBDC centers utilized the student resources of their host institution? To determine what the best practices were of SBDC centers with their host institutions, a survey was developed. The membership of ASBDC will be surveyed with regard to their best practices, if any, with their host institution. IRB approval was recently obtained, and initial surveys have been distributed by email. The survey is to determine the type of interaction with the host institution. Does the SBDC only interact within the partnered College/Department of the host

institution? What type of support do they provide for the host institution and what type of resources from the host institution do they utilize in aiding small businesses? If they don't currently work with their host institution, would they want to have this relationship in order to better serve their clients? The result of this survey and suggested best practices for SBDC centers with their host institutions will be presented at the conference in February 2019.

Keywords: Small Business Development Center; Best Practices; Entrepreneurship; Student Consulting

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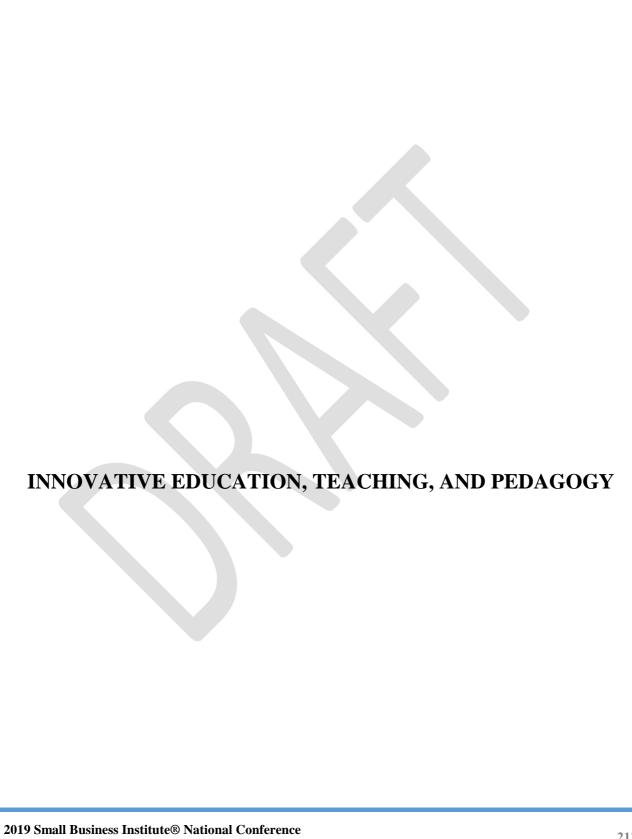
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Mock Trade Show

Angie Kovarik, Bemidji State University Debra Sea, Bemidji State University

Abstract

Undergraduate students from Marketing (BUAD 3361) and Media Production for Social Entrepreneurship (MASC 3650) present their final projects at a mock trade show during the LaunchPad weekly Entrepreneur Meetup to receive feedback on their projects.

Summary

Every semester, undergraduate students from Marketing (BUAD 3361) and Media Production for Social Entrepreneurship (MASC 3650) present their final projects at a mock trade show during the local LaunchPad weekly Entrepreneur Meetup.

The LaunchPad is a co-working space for entrepreneurial support in our region. The LaunchPad also offers a weekly gathering of entrepreneurs, mentors, and advisors to educate, engage, and connect local entrepreneurs. These "Entrepreneur Meetups," are modeled after the 1 Million Cups initiative founded by the Kauffman Foundation.

Course info:

Marketing (BUAD 3361) is a junior level course that focuses on the distribution of goods and services, product development and pricing, consumer motivation and buying behavior, as well as branding and target marketing. This course is required for students majoring in Business Administration, Marketing Communication, and Sports Management, but is open to all interested students.

At the onset of the semester, marketing students are assigned to groups and asked to brainstorm a new product idea. Once the groups have determined their new product idea, they begin applying marketing knowledge towards their products. For example, one week we will discuss the various types of market segmentation and in that same week the students begin researching market segmentation and select appropriate target markets for their product. The following week we will research their potential competition. This process continues throughout the entire semester covering various topics such as value proposition, concept testing, SWOT, pricing, branding, and packaging.

The students are tasked with designing their own trade show booths and creating a product pitch they share with the entrepreneurs at the Entrepreneur Meetup. This process allows the students to use their creativity and practice presentation skills. Some of the students have pursued their product ideas after the course has ended. The project utilizes hands on learning and instills a sense of confidence, and builds networking skills.

At the end of the semester, the students participate in a mock trade show at the Entrepreneur Meetup, Approximately 50-75 entrepreneurs attend the event each semester and offer constructive feedback to the students in person, and via formal evaluations.

Media Production for Social Entrepreneurship (MASC 3650) students study social entrepreneurship and write and produce videos to record their assignments. This course is an elective junior level course with no prerequisites. Students from all majors are welcome in the course and students from many majors have successfully completed the course including: Mass Communication, Marketing Communication, Business Administration, Sport Management, Sociology, Creative Writing, Science, Psychology, and Political Science.

For the final project, student teams choose an environmental or social issue that they care about to focus on. Then, teams research and create a business model to address their issue using the methodology from Alexander Osterwalder and Yves Pigneur's "Business Model Generation." This methodology includes: Customer Segments, Value Proposition, Channels, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure.

Students assemble their final project on a WordPress website and present their model at an Entrepreneur Meetup. To prepare, students write and practice a pitch and design a trade show booth. After the Entrepreneur Meetup, students use the feedback from the entrepreneurs to write and produce a crowdfunding video to raise funds to launch their business model.

Examples of projects include:

- Beanies for Buddies Buy one/give one hand knitted hats to support pediatric cancer patients.
- Plarn Plus Sell balls of plarn (plastic yarn from plastic bags) to increase recycling and reuse
- Habitats United Sell handmade charm bracelets to support local endangered species.

Entrepreneur Meetup

On the day of the event, students arrive at the LaunchPad and set up their booths. The LaunchPad manager then provides a short overview of the project to the entrepreneurs and the students take their places at the booths. The entrepreneurs go from booth to booth listening to the student's pitches, asking thought provoking questions, and providing constructive feedback. During the subsequent class period, both instructors review the entrepreneur's feedback and receive feedback from the students on their experience.

Student Feedback:

ZR, **Marketing Communication Graduate:** "I was a part of the trade show for both courses. I participated, first, in the Marketing class, and it was the first time I was genuinely excited about college. I left the trade show feeling accomplished. My favorite part was just talking with the entrepreneurs. It made me feel important when they showed interest in our idea."

KH, Creative Writing Senior: "My group did implement the feedback that we received at the tradeshow because a lot of the entrepreneurs gave their input on what would capture potential buyers better and it was really helpful in creating our video. One entrepreneur said that showing the little

card when having someone open up our product box would personalize it a little more while also showing how impressed they are with our hats."

SH, Mass Communication Sophomore: "The best part of the trade show was getting to see every other groups ideas and products! It was awesome to see how creative other students are. Another great part was all the feedback we received on how to make our product better."

Other Feedback:

TF, LaunchPad Coordinator: "The BSU Marketing student tradeshow is a wonderful opportunity for our entrepreneur community to connect with college students. The entrepreneurs get jazzed up seeing all the creative ideas the teams come up with and have been are very supportive of those that show interest in taking it beyond a classroom project."

Conclusion

Overall, the feedback from both the students and entrepreneurs/business leaders has been positive. Our students enjoy the real-world experience that the trade show brings. They enjoy the interaction and feedback that comes from working one-on-one with local business leaders and entrepreneurs. The project builds confidence, and provides the students with real world experience on how to handle constructive feedback. The students are also able to view the project from the different angles and perspectives that the entrepreneurs/business leaders provide. The trade show strengthens the student's public presentations skills and instills a sense of pride.

SBI Post Project Review and Its Importance

Dr. Ron Cook Associate Dean and SBI Director, Rider University

> Diane K. Campbell Business Librarian, Rider University

Abstract

Rider University's SBI Program is a capstone, experiential learning opportunity for undergraduate and MBA students. It allows students to gain field experiences integrating academic and life skills in a consulting setting with real clients who benefit from the solutions developed. However, a typical shortcoming is that the consulting process typically stops before the recommendations are implemented, it is hard to say how effective students' recommendations actually are. The focus of this presentation is on the value of the post project review process, problems with conducting this review, and why incorporating this in your SBI program is important.

Narrative

Rider University's SBI wanted to learn the "rest of the story" in order to determine the effectiveness of their recommendations, and to see if certain types of projects are best for student consultants. We identified 40 past projects, going back over 10 years, and began the follow-up. We immediately ran into difficulties in that the client data often had changed. Some of the firms were missing and in others, the key client contact was no longer there. We were successful in interviewing six separate clients and one of those, called Company 1, had done six separate SBI projects over the past decade. We focused on this client because of the consistency over time – it was the same contact person in the same role, while the students and projects varied over the years.

Company 1 is a medium sized business with roughly 5 million dollars in annual sales, and is a producer/distributor of sanitary cleaners, chemicals, and equipment for commercial customers in New York, New Jersey, Pennsylvania, and Connecticut. Its customers are schools, healthcare, housing authorities and Airport terminals. Collectively, given all recommendations and information obtained through these six projects, the client attributed twenty percent of the business' growth to date to his implementation of the student consulting teams' recommendations.

The results of all of these student projects will be discussed collectively as all of the projects were developing marketing strategies for their clients, and half of them were also conducted strategic audits of the client's operations. All of the companies implemented the students' recommendations, but not over the same time frame as projects were done in different years. Companies attributed improvements in sales ranging from about five to 50 percent.

Through these six companies (11 projects), we are able to confirm that the SBI program does have a beneficial effect. Whether the company had an increase in revenue or gained a new perspective on their company, all clients acknowledged the usefulness of the projects. The presentation will talk in greater depth on the findings, the shortcomings of the research, and how important it is for SBI programs to perform a post project review process to determine their own programs effectiveness.

Pitching Entrepreneurship to Capstone Engineering Students

Whitney Peake, Western Kentucky University Stacy Wilson, Western Kentucky University

Abstract

Universities consistently call for collaboration and cross-disciplinary work, and a natural fit exists between entrepreneurship and engineering to leverage such opportunities. However, it can seem daunting to determine how to integrate these two disciplines, particularly if few bridges have been forged previously across colleges on campus. Further, little is known about how engineering students benefit or what best practices exist to help augment the entrepreneurial education experience. As such, during our presentation, we will discuss what the academy knows about integrating entrepreneurship and engineering education, our experiences in developing a pilot collaboration incorporating pitches into the engineering capstone project classroom, as well as a quick overview of information obtained regarding pre and post-test results of engineering students' knowledge of entrepreneurship, pitches, confidence in presenting, and their perceived efficacy in undertaking entrepreneurial activities.

The authors will deliver an initial workshop on developing and delivering an "elevator pitch" to senior capstone engineering students on October 23, 2018. Before the workshop, students in the course will complete a pretest about their knowledge of entrepreneurship, pitches, confidence in presenting, and their perceived efficacy in undertaking entrepreneurial activities. The authors will then deliver the workshop.

In between the authors' intervention and the next visit to the class on November 13, students will be required to submit a video elevator pitch related to their capstone projects. Instructors will review all pitches, and choose the top 7. During the November 13th meeting, the top pitches will be shared with the class, voting will occur for the best pitch, with awards given to the top 3 pitches. Students will then be assessed via post-test on their knowledge of entrepreneurship, pitches, confidence in presenting, and perceived efficacy in undertaking entrepreneurial activities.

As an interdisciplinary field, understanding how entrepreneurship education can complement and develop innovations in curricula across contexts is critical, as is better understanding of best practices (or deficiencies) in delivering such content.

Introducing Liberating Structures as Engagement for Business Courses and Beyond: An Innovative Pedagogy

Dana Cosby, Western Kentucky University

Engagement is a topic of great interest for all sorts of organizations, including those in private and public sectors. A recent Gallup poll indicated that 70 percent of American workers are not engaged in their workplace. Results from another study conducted by the Society for Human Resource Management (SHRM) mirrors the Gallup survey, reporting engagement and experience as a key concern for organizational leadership. Improving engagement in the workplace is of great concern as Gallup's research shows engagement increases productivity, reduces turnover, and improves quality (Limpmanowicz & McCandless2013).

Student engagement as an issue headlines higher education, cited as a driver of retention and overall student success. Stakeholders challenge educational institutions to innovate practices and programs to create new levels of this magical phenomenon to respond to changes in how students learn and indeed, how the "real world" now operates. However, the need for student engagement reaches far beyond classroom walls. As students enter the workforce, they must be equipped to to include and engage others.

Drawing from literature from power, leadership, and pattern language, Liberating Structures includes thirty-three tools that can be tailored and combined to support different purposes of human interaction and engagement. Basic principles of the technique include a focus on microstructures (or the way routine interactions are organized). Microstructures for may be tangible (physical spaces such as meeting rooms, office, or water cooler) or intangible (routine ways of organizing interactions such as status reports, open discussion or brainstorming sessions).

It can be noted that physical space (or tangible microstructures) in classrooms has been the focus of pedagogical study in recent years as interest in collaborative learning spaces has increased. However, little change has been explored and implemented with regard to the ways of organizing interactions (or intangible microstructures). To change the routine structures, organizations (and educators) must push beyond the "Big Five" methods of presentation/lectures, managed discussions, status reports, open discussions, and brainstorming. This requires a new mindset, and more importantly, a new set of tools. Liberating Structures provides that new way of viewing and facilitating interactions. The Liberating Structures method introduces thirty-three new tools that promote new levels of inclusion and ways of organizing communication processes in groups.

During my presentation, I will discuss academic research and professional practice findings about integrating Liberating Structures in the classroom and organizations, my experiences in developing course assignments that apply tools of Liberating Structures, as well as a quick overview of information obtained regarding pre-and post-attitude measures of business students' Engagement Expertise through the administration of the Individual IEQ (Inclusion and Engagement Quotient). The IEQ measures the inclusion and engagement expertise of individuals and groups. Inclusion is a key part of the effectiveness of engagement as it is a precursor to engagement activities. The IEQ

provides helpful information on areas of improvement for inclusion and engagement practices of individuals.

I will deliver an initial workshop on employing and integrating liberating structures to senior human resources students on November 7, 2018. Before the workshop, the students will complete the Individual IEQ Questionnaire about their Engagement Expertise. I will then deliver the workshop.

In between the intervention and the next Liberating Structures meeting planned for November 14th, students will be required to prepare a Liberating Structures sequence for a given topic or issue. Students will then complete the IEQ Questionnaire to determine growth in Engagement Expertise.

This pedagogical research is important because it will measure the development of new skills and competencies of business students for potential future use, while promoting increased levels of engagement in the classroom. If successful, the approach could be shared in with other interested faculty members to enhance student experience.

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The Case for Competition: Best Practices for Launching a Business Case Competition

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Abstract

Live cases are an experiential learning tool that can increase student engagement, performance, and workforce readiness. Hosting a live business case competition at one's university or college is a way to increase the experiential learning opportunities for students. The University of West Florida's College of Business hosted its first Master's Level Case Competition and developed a set of best practices and recommendations for others who are interested in conducting this type of high-impact practice activity.

Background

Experiential learning seeks to bridge the gap between theory and practical application for students. It has taken many definitions which generally encompass a sense of learning by doing. Kolb (1984) emphasized that experiential learning differed from rational, cognitive learning theories by providing a holistic experience for learners that integrated "experience, perception cognition and behavior" (p.21). An AACSB Task Force defined experiential learning as a "business curriculum related endeavor which is interactive (other than between teacher and pupil) and is characterized by variability and uncertainty" (Carter, Hickman, McDonald, Patton & Powell, 1986, p.3).

Universities and colleges have increased their promotion of experiential learning in recent decades because of its impact on student performance, engagement and workforce readiness. There are a number of studies that show positive relationships between experiential learning and student performance in the classroom (Carini, Kuh & Klein, 2006; Busseri & Rose-Krasnor, 2008). Kuh (2008) asserts that active learning also increases a student's level of engagement, particularly when employed through high-impact practices. High-impact practices include an array of activities and experiences that move beyond the classroom so that the student is prepared for the reality of the modern work environment.

AACSB also recognizes the importance of engagement in fostering quality and meaningful business education. In its 2015 standards, it defined student academic and professional engagement as occurring "when students are actively involved in their educational experiences, in both academic and professional settings, and when they are able to connect these experiences in meaningful ways"

(p.37). Business colleges have subsequently embraced experiential learning as a tool to enhance its student engagement and to prepare its students for the workplace.

Live Case Pedagogy

Live cases are one pedagogical tool that promotes active learning through an experiential approach. Using live cases can create a learning environment where students incorporate and apply different learned theories to a real-world situation. Elam and Spotts (2004) support that using live cases as a teaching tool can enhance critical thinking, project management, oral presentation, and written communication skills.

Kennedy, Lawton, and Walker (2001) discuss the importance of engaging students in the real world during their academics to better prepare them for a dynamic workplace. Graduating students need to have well-developed problem solving and analytical skills to be prepared to address the problems of the future. Charlebois and Foti (2017) emphasize how the inclusion of live cases in a course made students think critically in an uncertain environment without clear answers. Given the support of AACSB and the growing literature surrounding the effectiveness of live cases in improving student learning and workforce readiness, business education entities have embraced this pedagogical approach (AACSB, 2015; Bove & Davies, 2009; Camarero, Rodriguez-Pinto & San Jose, 2010; Roth & Smith, 2009).

Live Case Competition Creation

Live Case Competitions provide an innovative way for enhancing the skillset students develop via experiential learning. Case competitions give students a means to analyze a real-world business problem, deliver creative and well-grounded solutions, and present to involved stakeholders. Weybrecht (2016) states that competitions also provide a number of other benefits including networking opportunities, travel, and potential internships/jobs.

There are numerous business case competitions across the world each year. The University of West Florida (UWF) MBA Program students have participated in several of these events in the last decade. The UWF College of Business (COB) has recently enhanced its emphasis on experiential learning and implementation of live cases throughout the curriculum. As a continuation of these efforts, UWF's COB created and ran its first Master's Level Case Competition in April 2018. The college is in the process of planning its next competition in April 2019.

Best Practices and Recommendations

From the creation to the execution of the competition, here are recommendations and best practices:

- Identify a Live Case Coordinator/Ombudsperson: This person will be responsible for building relationships with different businesses to create an inventory of live case scenarios and appropriate problem identifications.
- Set parameters for accepting a Live Case: A competition level live case should have the ability to create an impact for both the participating organization and students. Our first live case came from a NASDAQ traded company.

- Create an incentive for universities to travel and compete: We partnered with our Center for Entrepreneurship to offer a \$10,000 prize package. In addition, we hosted a reception for participants in downtown Pensacola at a historic venue.
- Set the size and scope of the competition: Only accept the number of teams you can support logistically. Our initial competition had five teams.
- Develop a rubric that is consistent and comprehensive across each case for evaluation by the judges.
- Establish a rigorous set of competition guidelines and rules: Review other case competition guidelines and develop a clear set of rules. One issue we did not plan for was a team asking to make a change to their presentation at the last minute after it had already been officially submitted for the completion. We updated our rules to address this issue.
- Event Feedback: After the competition, solicit feedback from the participating organization and students. Use this information to make the event better in subsequent offerings.

Conclusion

The first UWF COB case competition had a very short planning cycle. Conceived after our students returned from a case competition at another university in late November 2017--we had roughly five months to plan and execute the event. Ideally, 6-9 months is needed to ensure proper planning. Abston and Vuong (2017) describe the importance of "fit" when it comes to the employment of live cases. The authors state that to achieve appropriate outcomes and results with live cases, it is important to pay attention to the definition of objectives, organizational commitment, need for confidentiality and issue identification. The importance of "fit" is also true with developing a case competition.

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WORKSHOPS

Publishing in the Journal of Small Business Strategy

William McDowell, Bradley University Michael Harris, East Carolina University Whitney Peake, Small Business Institute Joshua Aaron, Middle Tennessee State University Raj Mahto, University of New Mexico

The Journal of Small Business Strategy (JSBS) is one of the premier products of the Small Business Institute. The journal is currently in its 29th year of publication, and it continues to grow in terms of reach, reputation, and submissions. This upward trend should be a source of pride for our organization, and those of us on the editorial team would like for you to continue to view JSBS as "your journal." Articles found in JSBS continue to be a resource for scholars around the world, and we can now boast over 100,000 full article downloads from our own website alone over the past two years. Our goal at JSBS is to continue to facilitate quality research in the areas of small business and entrepreneurship. The purpose of this workshop is to help the members of the Small Business Institute better understand what we look for in submissions to JSBS. This workshop will focus on three distinct aspects of the journal, each with unique presentations, and general information in regards to publishing within the journal. Thus, the workshop will be broken down as follows:

- 1. A presentation about general guidelines and research tips for publishing in JSBS
- 2. A panel discussion including questions and answers with the section editors concerning what they see in submissions, their assessment of reviewers' viewpoints, and what they look for in determining acceptance or rejection (Joshua Aaron, Raj Mahto, and Whitney Peake).
- 3. In addition, we will also discuss the steps we are taking to secure impact factor ratings and what you can do to help with this process. This takes all of us working together in order to move JSBS forward.

Qualitative Research Workshop

Jerry Kudlats, Jacksonville University

Qualitative research has a reputation of being difficult to publish (especially with US journals) and as a result, researchers tend to shy away from this methodology. This does not have to be the case! This workshop will focus on various aspects of qualitative research, including, but not limited to, writing, publishing, and reviewing qualitative manuscripts. If done properly, qualitative research can be extremely rewarding.



2018-2019 Human Resource Update for Small Business and Entrepreneurs

John Hendon, University of Arkansas Little Rock LeAnne Coder, Western Kentucky University Timothy Dunne, Small Business Institute

Abstract

This workshop will consist of a group of invited panelists who will discuss the changes in Human Resource Management (HRM) practices that have occurred in the past year. HRM continues to change at a rapid rate, due in part to changes in the executive branch of the federal government, with a number of changes occurring in the definitions of protected class individuals. There are also continuing changes in the health care landscape, recruiting and selection processes, and many other issues. Each of these issues has the potential to affect small businesses as well as larger corporations, but most small business owners and managers do not have good operational knowledge of them. This workshop will brief conference participants concerning the topics that consulting clients need to be made aware of.

The Program

The program will be broken down into discussion of federal agencies and their regulatory changes. We will also discuss some significant state and local law changes that are making the employment landscape more of a challenge. Large scale federal changes (or proposed changes) have been made in regulations controlling the National Labor Relations Act (NLRA), the Fair Labor Standards Act (FLSA), the Occupational Safety and Health Act (OSHA), the Equal Employment Opportunity Commission (EEOC) and Title VII of the Civil Rights Act of 1964, along with significant changes within the Department of Labor and other federal government agencies.

The session will provide faculty with the necessary information with which to avoid errors in recommendations resulting from student or faculty consulting projects.

Creating a Winning Game Plan in Granting Writing – How to Integrate Entrepreneurship and Small Business into Other Disciplines When Applying for Grants

Kathleen Liang, Kellogg Distinguished Professor of Sustainable Agriculture and Community Food Systems, North Carolina Agricultural and Technical State University

Abstract

This workshop targets on scholars and Small Business Development Center staff to share successful grant-writing strategies to integrate entrepreneurship and small business concepts into various research, teaching, and outreach subjects. We will explore and investigate purposes, rationale, significance, and linkages of entrepreneurship and small business concepts to different funding agencies. We will highlight real proposals that have been funded and not been funded by specific agencies to compare/contrast grant-writing strategies. Finally, workshop participants will engage in a simulated grant-writing exercise to design and develop your own grant proposals.

Workshop Descriptive

Writing a successful grant proposal could be an intimidating process. Scholars in entrepreneurship and small business fields are often invisible to scientific fields. Most of funding agencies such as National Institute of Health (NIH), National Science Foundation (NSF), and US Department of Agriculture (USDA) require creative concepts proposed by interdisciplinary teams to design, develop, and implement strategic proposals to deliver transformative impacts on our society. There are tremendous opportunities to integrate entrepreneurship and small business into other scientific programs. The only question is – how?

Common myths about writing successful proposals include:

- You have to fail and try multiple times to revise and re-submit the same proposal to the same agency before you receive a grant;
- You have to be a seasoned scholar to win large and sustainable grants;
- There seems to be a winning formula for anyone to win a particular grant;
- Reviewers might be biased against some ideas, some people, and some institutions when ranking proposals;
- Only hard-core scientists (S.T.E.M) are more likely to secure substantial grants from multiple agencies; and
- If you have a great idea, then someone will definitely fund your study.

The reality of writing successful grant proposals could be significantly deviated from ones' imagination and experience, depending on funding purposes and size of total grant budget each year. The biggest challenges of writing grant proposals are:

- It is almost impossible to access sample successful (or any submitted) proposals due to protection of intellectual property;
- Reviewers' comments vary significantly from year to year and panel to panel, and sometimes comments are confusing and conflicting to writers.

• Some institutions hire professional grant writers, however, these grant writers do not understand the real sciences, theories, and applications embedded in proposals. The miscommunication between grant writers and investigators often creates negative impacts on writing successful proposals.

This workshop will share winning strategies in grant writing from the following perspectives:

- Singular-disciplinary, multidisciplinary, and interdisciplinary what they are, how they work, and why they make any differences in writing a successful grant proposal.
- Team building members' characteristics, experiences, skills, and professionalism.
- Shared tasks and responsibilities –communication, negotiation, and working with professional grant writers who are not scientists.
- Proposal framework and contents what to include, how to write, and who cares.
- Grant writing relates to publications and career development design and establish a winning strategy from early career to maturity.

The most important element of this workshop is to use real grant proposals, prepared and submitted by presenter, to highlight and explain specific strategies – what works, and what not. It will be a very refreshing and helpful experience for workshop participants to read these proposals, and learn about writing style, format, and presentation in preparing proposals.

Workshop Schedule (90 minutes)

Introduction and ice breaking exercise (15 minutes)

Proposal writing strategies and Q&A (30-40 minutes)

Nature of a proposal – agencies and reviewers

Team building

Working together

Proposal framework and contents (use real examples)

From grant writing to career planning

Participant practices (25-30 minutes)

The workshop presenter has 20+ years of experiences in writing grant proposals for research, teaching, and outreach programs. She has served on several grant review panels. She has received significant grants from USDA, NSF, foundations, and other organizations as a Lead Principal Investigator, Co-Principal Investigator, and Collaborator. Her most recent grants include: an NSF grant to build transformative dynamic modeling systems to examine linkages between human systems and nature systems within food deserts; farm labor management decisions and practices transitioning from hand tools to machinery funded by USDA; farm enterprise financial analysis to create sustainability for mixed organic vegetable operations among small and limited-resourced farmers funded by USDA; and racial equity issues within food systems funded by Kellogg Foundation.

COMPETITIVE ABSTRACTS

Awareness and Utilization Of H-1B Visas by Employers in the Technology Information Field

Joseph R. Bell
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Abstract

H-1B is a temporary/nonimmigrant visa in the United States afforded under the Immigration and Nationality Act, section 101(a)(15)(H) which allows U.S. employers to employ foreign workers that hold specialty skills for occupations, such as biotechnology, chemistry, computing, engineering, statistics, journalism, medicine, education, etc. The visa requires a minimum attainment of a bachelor's degree or its equivalent. It is initially for three years but can be extended for additional three years. H-1B work-authorization is strictly limited to employment by a sponsoring employer and is limited to 65,000 visas each year. This research initiative seeks to understand awareness and utilization of H-1B visas by employers in the technology information field.

Earth's One-dimensional economy - Will It Translate to Business in Outer Space?

Sharon A. Kerrick, PhD – Bellarmine University Denise M. Cumberland, PhD – University of Louisville

Abstract

The Earth's economy is purportedly one-dimensional. Revenues for space commercialization, space tourism, natural space resources, and space mining are among the various topics being researched, written and discussed regarding business efforts in outer space. This paper examines/analyzes various published articles that have speculated over the past 25 years about how and what types of businesses would be functioning in the year 2020. Additionally, we report on the monies invested in outer space business growth endeavors from 1957-2016.



Utilizing Big Data to Explore Opportunity Search Behaviors and Entrepreneurship Policy Effectiveness

David Noack, Weber State University Douglas Miller, Virginia Commonwealth University Rebecca Guidice, University of North Carolina - Wilmington

Abstract

This research is focused on identifying factors which promote greater interest in entrepreneurship and an increase in opportunity identification behaviors. The success of the top down approach utilized by the US government has been questioned and many believe that the bottom up approach is much more successful. By identifying important general environment trends and demographic factors, we are able to better describe the ideal approach for promoting entrepreneurial search behaviors. Rather than focus on planned behavior, we argue that actions present a more appropriate basis for analysis. We develop theory to explain when external factors will have the greatest impact on individual opportunity search behavior. The increased popularity of entrepreneurship focused television programs, such as Shark Tank, has contributed to a growing interest in entrepreneurship among the general public. Individuals may have never considered the possibility of starting their own business but are encouraged by the "everyday" stories which these programs present. We are most interested in the impact that external factors, in this case, the new venture representations in popular media, governmental investment levels, and entrepreneurial education programs have on individual opportunity search behaviors.

We test our hypotheses using a dataset created using data from multiple sources, including the US Census Bureau, the US Patent and Trademark Office, the Bureau of Economic Analysis (BEA), the SBA, and the NSF. We empirically examine the impact that the increased prevalence of entrepreneurial startups represented in popular media has on individual opportunity search behaviors using the Google Trends tool. Our initial results suggest moderate or strong support.

Keywords: opportunity, search behavior, entrepreneurial activity

What Makes Entrepreneurship Grow? A Mid-South Regional Comparison of Entrepreneurial Activity

Ms. Sadiksha Upadhyay, University of Arkansas Little Rock Dr. Joe Felan, University of Arkansas Little Rock Dr. Joseph Bell, University of Arkansas Little Rock

Abstract

The importance of entrepreneurial activity to the overall health of a state, a region and a country are well established in the literature. This study examines economic activity in several mid-south states — Alabama, Arkansas, Kentucky, Mississippi and Tennessee. These states were selected purposefully because of their similarities and their location in the mid-south region of the U.S. This paper incorporates three well established measures when looking at impact factors; unemployment rates, gross domestic product, and household income. This study attempts to identify which factors cause some states to have higher entrepreneurial activity than others.



Economic Optimization of Agricultural Production in FCT, Abuja Nigeria

Joy Enyinnaya, Colorado State University

Abstract

This paper presents a mathematical programming model based on a simplex criterion technique which can be used for analysis and simulation of agricultural production plans as well as for the study of impacts of the various policies in agriculture. The model can achieve the optimum production plan of an agricultural region by maximizing total gross margin under a set of constraints for land, labor, available capital and marketing. The recommended agricultural enterprises selected based on profitability and high demand were cassava, groundnut and fish production. An actual benefit analysis was also calculated in order to identify the most cost effective combination.

Keywords: Linear programming model, Optimization, Gross margin, Constraints, Maximization



SBI Journal Articles Over Ten Years: A Review Of Topics, Research Methods And Future Research Possibilities

William B. Mesa, Metropolitan State University of Denver Andrew Holt, Metropolitan State University of Denver

Abstract

This provides a comprehensive literature review of articles appearing in the SBI Journal during 2008-18. The purpose of the review was to (1) identify concentrated areas of publication; (2) light areas of publication; and (3) identify research gaps where further work is needed to extend our current knowledge of small business theories and practices. Articles were coded by Domains (e.g. Capital Acquisition, Entrepreneurial Behavior, etc.) followed by coding of Topics within each Domain. Other coding schema for the review were as follows: publications by data type (quantitative v. qualitative); publications by methodology used (e.g. regression, ethnography, theory building, etc.); and publication by paper type (e.g. research v. pedagogy). Unsurprisingly, while most papers focused on strategic management, small business and entrepreneurial education; and entrepreneurial behavior, there were relatively few submissions in the fields of small business-related accounting, marketing, legal, and environmental research. One of the problems facing the researcher is the fact that small business and certain business-related subject areas, such as accounting and finance, are typically seen as separate fields of study, with the small business regarded as unfruitful environment for meaningful research (Parry, 2015). Our findings reveal gaps in highly relevant topics and methods yet conspicuously absent: feasible data analytics at the small business scale; accounting measures that integrate financial and non-financial data sets; strategies for small accounting firms and changing business conditions. In broader areas: case studies (as a research methodology) on small business by industry; "Amazon effects"; grounded theory research; and ethnography (also as case methodology) on owners, customers, communities.

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Financial Innovation Facilitating Women Entrepreneurship in Patriarchal Societies

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Sukkur IBA University, Sukkur, Pakistan
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Abstract

Mobile Money (MM) has the potential to enhance women entrepreneurship in specific, and promote small business in general in the developing countries by increasing the financial inclusion of unbanked population. Involvement of women in entrepreneurial activities is of huge importance to support economic development in these countries but unfortunately patriarchal trends bring various sociocultural, religious and financial barriers for women. Which include restrictions in mobility, lack of financial literacy, limited access to finance and conventional banks, and inability to access financial services. MM can be "at the door step" solution to these obstacles and it has the potential to facilitates basic financial services of small business with ease and convenience which will bring economic, social, and individual development by increasing savings rate, circulation of money, and by reducing income volatility.

MM has succeeded to capture huge market share in many developing countries in the past decade because of its convenience, ease of use, and wide spread accessibility. It has the potential to bring financial services to nearly 2 billion unbanked consumers from the developing world.

This quantitative study is based on Technology Acceptance Model (TAM) and the analysis of factors that determine adoption and preferences of people for the use of technology. Primary data will be collected from women entrepreneurial ventures and small business from the rural and urban areas of Pakistan to investigate the obstacles in establishing and running small businesses and to what extent mobile money has succeeded to address those needs.

Key Words: women entrepreneurship, small business, financial inclusion, financial inclusion mobile money services, patriarchal societies.

Examining Small Farm Enterprise Financial Analysis in Mixed Vegetable Operations

Kathleen Liang, North Carolina Agricultural and Technical State University Janet Osawere, North Carolina Agricultural and Technical State University

Abstract

Small-scale farmers often face challenges in sustaining profitable operations due to resource constraints and limited market opportunities. Large-scale commercial producers have the advantage to alleviate financial risks under many government support programs. Small-scale farmers often take on other jobs, or use personal or family funds to supplement farm income. However, recent improvement of specialty crops and direct market development seem to motivate more small-scale farmers to identify new and profitable market segments. This presentation will share research-based information from an on-going study funded by USDA to establish a long-term farm enterprise financial analysis focused on organic-certified and non-organic-certified mixed vegetable operation. We will explain data collection process based on production and management strategies on our research farm in Goldsboro, NC since 2017. Seasonal data of production, operation, and management will be shared. Market prices of organic vegetables and non-organic vegetables are based on local farmers' market weekly reports. We applied FINPACK and EXCEL spreadsheet analysis to complete cash flow statement, income statement, and balance sheet for a ¼ acre plot. Finally, we will discuss risk variations, resource issues, and efficiency for small-scale farmers who are involved in or intend to transition into certified organic mixed vegetable operation.

Small Business and the Supply Chain: The Influence of Social Intelligence and Relationship Quality on Supply Chain Resilience

Scott R. Cox, Western Kentucky University

Abstract

The literature details many challenges facing small and medium-sized enterprises (SMEs) including managing the supply chain though collaborative relationships (Soh and Roberts, 2005). Collaboration has been described at the driving force behind effective supply chain management (Richey, 2007). Relationship quality is pivotal in supply chain relationships (Jiang, Shiu, Henneberg, & Naude, 2016) and thus, supply chain collaboration. Recognizing that humans do not always act rationally, care about others, and are influenced by their cultural background, the "people dimension" of supply chain management (SCM) is considered the most underrepresented research topic within the discipline (Schorsch, Wallenburg, & Weiland, 2017). Understanding the behavioral dimension should be a central theme in any supply chain (Huo, Han, Chen, & Zhou, 2015) as the behavior of a focal actor within the supply chain can directly affect an exchange relationship (Schorsh et al., 2017). Social intelligence is largely about the ability to understand relationships and turns out to be especially important in crisis situations (Goleman and Boyatzis, 2008). Crisis often transpire that threaten to disrupt supply chain operations and jeopardize the ability of firms to perform effectively and efficiently (Melnyk et al. 2015). In his seminal work The Resilient Enterprise, Sheffi (2005) illustrates how organizations can decrease the likelihood of a supply disruption by developing collaborative relationships. Collaborative relationships have a positive effect on resilience (Wieland & Wallenburg, 2012). This research will examine the impact of social intelligence of the owner/operator/manager and relationship quality among business partners on the resilience of SMEs.

Supply Chain Talent in Small and Medium Enterprises: An Exploration of Relevant Skills and Their Impact on Performance

LeAnne Coder, Western Kentucky University Scott R. Cox, Western Kentucky University

Abstract

Similar to larger firms, small and medium sized enterprises (SMEs) face a number of major challenges, including the development of human resources (Hudson, Smart, and Bourne. 2001). Smaller firms often have trouble obtaining and retaining top talent and that scarcity of talent has a magnified impact on SMEs (Thakkar, Kanda, and Deshmukh, 2009), thus making talent development a key priority for smaller organizations. In small businesses, finding supply chain talent with the suitable combination of skills and characteristics is considered a continuing challenge (Gibson et al. 2013; Ellinger and Ellinger, 2014). Previous research by Goffnett, Williams, Gibson, and Garver (2016) detailed 19 critical skills needed by supply chain professionals in larger organizations. Using employee/manager dyads, this study examines the importance of those skills in supply chain professionals in small and medium sized firms in addition to the congruence between the skills stated as important in the literature and the amount possessed by current supply chain professionals. Using the Resource Based View of the firm (Barney, 1991), we further analyze the effects of those individual skills and their congruence on performance.

An Empirical Study of Multi-National, Family versus Non-Family Businesses

Kip Kiefer, Rollins College Tim Pett, Rollins College

Abstract

Recently, there has been an increasing interest in research exploring the differences between family and non-family businesses. These studies have explored a variety of constructs and outcomes including impact on firm performance, leadership, technological innovation, management succession and employee retention, to name a few. This article builds on this stream of literature by analyzing an extremely unique data set that includes disparate family and non-family businesses from different nations. This empirical study includes 359 family and non-family firms from three different countries (India, France, United States), providing a unique portal into variances across continents and countries and between family and non-family firms.

We identify key aspects of family versus non-family businesses by investigating critical factors that influence firm performance. Firm performance variables include economic and non-economic goals including profitability, sustainability initiatives, and social goals. Independent variables include managerial practices, the type and rate of response by the firm (measured via social media), country of origin and family versus non-family status. Results indicate that differences exist between family and non-family businesses and across countries and we propose that the influence of social media may be a critical missing construct in most family business scholarship. It appears that how a firm is structured, where it is headquartered and operates, and how the firm communicates and responds to clients and stakeholders does, in fact, influence many firm outcomes. This article also provides avenues for future research opportunities and implications for scholars and practitioners.

The Influence of Social Identity on Entrepreneurial Opportunity Recognition

Kip Kiefer, Rollins College Justin Miller, University of Southern California

Abstract

Considerable research has been undertaken with respect to the claim that entrepreneurs and non-entrepreneurs differ in their ability to perceive entrepreneurial opportunities. Entrepreneurs are said to be more risk-seeking (Keh, Foo and Lim, 2003; Craig and Lindsay, 2001), think differently (Gregoire, Barr and Shepherd, 2010; DeKoning and Muzyak, 1999), more likely to come from a family with entrepreneurial experience (Barney, Clark, Alvarez, 2002), and may even vary in their genetic makeup relative to non-entrepreneurs (Lerner, 2012). Much of this work suggests that these differences exist between people prior to them engaging in entrepreneurial endeavors (Shepherd and DeTienne, 2005), while others suggest that these differences arise post hoc (Shane 2003).

We explore differences between entrepreneurs and non-entrepreneurs by investigating whether entrepreneurial alertness is cued by one's social identity, rather than by the characteristics of the entrepreneur. Using experimental techniques, we analyze whether a particular social identity's salience is important to a person's ability to perceive entrepreneurial opportunity. We categorize 450 survey respondents into one of four strongly held social identities and then participate in an experiment. Initial results support hypotheses that claim that social identity may be the missing construct that explains inconsistent empirical findings on the differences between entrepreneurs and non-entrepreneurs with respect to entrepreneurial alertness. Our study demonstrates that alertness is situational, where the situation may be simply the identity under which one is operating when confronted with novel data. This study contributes theoretical and practically to our understanding of social identity and its influence on entrepreneurial action.

Unfunded Mandate and Unconstitutional Takings from ER Entrepreneurs

Vanessa L. Johnson, University of Houston – Clear Lake

Abstract

Many emergency medicine physicians are bonafide entrepreneurs that work as independent contractors. Therefore, if the clients cannot afford to pay, they receive no compensation. The solution to this problem seems simple -- these entrepreneurs should stop accepting clients that cannot afford their services. However, this logical approach is not an option due to a law, which mandates that these physicians accept clients without regard to their ability to pay. Moreover, if a physician does not comply, he or she could be held liable for up to \$50,000 in civil penalties per violation, and even when these doctors comply, if they make a mistake, the same "client" that benefited from services free of charge can file a lawsuit! If this description seems far-fetched, think again. Not only do emergency medicine physicians deal with this dilemma every day, but they have done so for over **thirty years** due to the federal law, The Emergency Medical Treatment and Active Labor Act (EMTALA).

According to the American College of Emergency Physicians, EMTALA's cumulative, direct costs for uncompensated care to physicians annually is about \$4.2 billion!¹³ In other words, emergency medicine physicians are bearing a substantial burden of indigent care under the mandates of EMTALA. Consequently, the purpose of the paper will be to argue that legal reform is necessary to protect these small business owner-operators.

Keywords: Health law, Unconstitutional Takings, Entrepreneurship, Legal Reform

¹³ American College of Emergency Physicians' EMTALA Fact Sheet (available at http://newsroom.acep.org/fact_sheets?item=29930#_edn6) (citing Physician Marketplace Report: The Impact of EMTALA on Physician Practices" 2003. AMA Center for Health Policy Research).

ROUNDTABLES

Enthusiastically Engaging, Embracing and Supporting International Students

Angie Kovarik, Bemidji State University Debra Sea, Bemidji State University Veronica Veaux, Bemidji State University

Abstract

International students are an important component of our enrollment. At our institution, it has been challenging to integrate international students with our domestic students. Please join us as we discuss this topic from personal, instructional and institutional perspectives. What are you and your institution doing that works? What have you tried that has been less successful? What kinds of support do you offer international students? Target audience: Everyone who is interested in better serving international students. Expected outcome: Collected idea, tip and technique document that can be freely shared.



Participation points - Love 'em or Not so much.

Angie Kovarik, Bemidji State University
Debra Sea, Bemidji State University
Jason Brown, Valdosta State University
Dr. Dianne Welsh, University of North Carolina at Greensboro

Abstract

Many of us use or have tried to use participation points in our courses. We've used this category to award points for actively participating in the classroom or as a substitute for taking attendance. We'd like to discuss what we have tried, what works and hasn't worked, the tools that used (a rubric? something else? grade book?), what percentage of the final grade works best, and how to work with students who are introverts versus extroverts.

Target audience: Any instructor who has success stories to share or an instructor who would like to try using participation points.

Outcome and benefits: We'll collect the highlights of the discussion, including tips and suggestions in a document that will distributed to all participants.



High Speed Rail: Transforming Vision into Reality!

Raj Selladurai Indiana University Northwest

High Speed Rail is a popular and most frequently used mode of transportation in many parts of the world including several countries in Europe, China, Japan, and other Asian countries. In the US, recent developments related to high speed rail especially in California, Florida, and Texas have provided a strong impetus for high speed rail, which continues to gain momentum and growing interest among people in society, business, and industry. We recently published a book available on Amazon, Google, etc. titled, "Emerging Challenges and Opportunities of High Speed Rail Development on Business and Society" (Raj Selladurai, Peggy Daniels Lee, and George VandeWerken).

https://www.amazon.com/Challenges-Opportunities-Development-Industrial-Engineering/dp/1522501029/ref=sr_1_1?s=books&ie=UTF8&qid=1458084775&sr=1-1&keywords=Selladurai+high+speed+rail.

This book is gaining high interest and popular demand on social media like Twitter, Google, etc.

In this Roundtable session, we plan to present some brief updates on high speed rail developments in the US, and would like to hear thoughts and opinions from several of our stakeholders in society represented by attendees at the conference. We would also focus on how small businesses will benefit from this entrepreneurship project including the economic development of local areas surrounding/in the vicinity of the proposed rail stations. Some examples would be discussed of local construction companies and others becoming actively involved in the local economic development of the region between the two or more rail destinations, including at proposed rail stations along the routes. This Roundtable discussion would be of interest and benefit to the audience from an Entrepreneurship/Small Business perspective as rail has enormous impact on various local aspects including economic, social, technological, environmental, transportation, travel, etc. Also we like to hear from our audience that would include valuable participants in the rail developments and future potential users of high speed and lower speed passenger rail.

Entrepreneurship Classroom Delivery and Programming Innovation: Welcome to 2019!

Joe Felan, University of Arkansas at Little Rock Joseph R. Bell, University of Arkansas at Little Rock

University enrollments are down. MBA programs are struggling. Competition now emanates from every corner of higher education – private, public, for-profit, online, "downtown presence", and more. If it has "university" or "college" in their title they are delivering an array of courses and degrees into the marketplace.

The question we pose is, "What have we done, or what are we doing as a discipline, to position ourselves in the new landscape?" For example, at UA Little Rock we historically offered a major and minor, a campus-wide course, and a fully available entrepreneurship concentration online (new in 2018). Our Consulting course creates great exposure to the business community. Looking forward, we are exploring the idea of students running a coffeehouse in the College of Business. Learning by doing.... But we also realize there is a lot we do not know about this undertaking.

A representative from Microsoft was on our campus and when asked, "What skill sets do you hire?",



he responded...." Tech, but we teach them what we want them to know,and entrepreneurship." What does this teach us? Let's learn from each other and explore some ideas.