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Editor
Eugenie Goodwin
University of Louisiana at Monroe
Dear Conference Participant

As seen on our website, which looks so good, you will see an inscription that reads: “Dedicated to fostering the ideals of small business and entrepreneurship.” This year’s program reflects this thought and is not short on contributions from our conference participants. There are over 20 paper presentations and six workshops that support our mission-of-sorts. In addition, this year we added the student pitch competition. While we are not sure of its outcome, we feel that it will become a regular part of our program.

ASBE 2013 will help you to successfully circumnavigate the changes in the field of small business and entrepreneurship. This year’s conference delivers quality presentations, workshops, and a panel luncheon and promises to be one of our best ever. Further, ASBE is a familiar group and offers us close interaction with colleagues and friends we have known for years. It is this closeness with members, who are generally from our traditionally southwestern roots, that is perhaps the best trait of this organization. I would also add that next year we have chosen to meet in Memphis, just a bit outside of our historical region, but is one that offers a change from many of the well-known places we have patronized in the past. Many of the new officers and members hail from Louisiana and this seems to be an inevitable nudge to move the center of gravity of our organization further east. I was struggling on how to define our region as it isn’t exactly southwest or southern.

I am grateful to have worked with a great slate of ASBE officers this year. I look forward to passing the baton to Laurie Babin, ASBE’s new president and her incoming administrative group. I would perhaps offer my greatest thanks to Eugenie Goodwin for her efforts to organize the conference program. Henry Cole, initiated into the officer ranks of ASBE this year, ably handled the membership tasks. William (Bill) Jackson worked closely with the program to coordinate the review of papers and awards for the Journal of Business and Entrepreneurship as well as his innovation of new awards to be presented this year. I also give my thanks to Martin Bressler for his advice as immediate past President. Finally, I give my deep thanks to Stephen Jones for introducing me to this group a few years ago. Steve is a dear friend and we go back to our doctoral program days.

I hope that you enjoy the conference and look forward to saying hi and catching up on the events of the past year.

Sincerely,

Daniel Glaser-Segura, President
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The Effects of Entrepreneurial Information Networks on Supply Chain Alertness and New Product Development Speed

Xun Li, Nicholls State University
Thomas J. Goldsby, The Ohio State University
Clyde W. Holsapple, University of Kentucky
Michael G. Goldsby, Ball State University

Abstract

This study examines relationships among patterns of information networks, supply chain alertness, and new product development speed. Hypotheses drawn from social network theories, entrepreneurship, and supply chain management literature are tested on data from 78 firms. The results indicate that firms with the pattern of entrepreneurial information network in supply chain benchmarking and supply chain partnering have higher supply chain alertness. Further, supply chain alertness has a positive effect on new product development speed. Based on findings, we introduce a framework to guide future research in the area of supply chain entrepreneurship.

Keywords: Entrepreneurial Information Network, Supply Chain Alertness, New Product Development Speed, Social Network Theory, Supply Chain Entrepreneurship

Introduction

It has long been recognized that being entrepreneurial in supply chain management (SCM) plays an important role in a firm’s success in global competition. In today’s business environment, high-profile CEOs are increasingly focusing on entrepreneurial practices in their supply chains as a basis for competing in new markets. Victor Fung, the CEO of Li & Fung, Hong Kong’s largest export trade company and an innovator in supply chain management, recognized that keeping every operating unit entrepreneurial was key to his company’s success in creating customized supply chains for every customer need (Magretta, 1998). A.G. Lafley,
Procter and Gamble’s former CEO, focused on working more with customers to develop new products and brands rather than purely utilizing the traditional corporate R & D model (Lafley and Charan, 2008); and Jeffrey Immelt, General Electric’s CEO, has increased revenues by 60% and doubled profits by turning customers into innovation partners (Magee, 2009). We contend that other companies can reach similar goals by developing supply chain entrepreneurship, which essentially enmeshes entrepreneurial approaches into supply chain management and operations.

Entrepreneurship, in its purest form, has been defined as the identification and exploitation of previously unexploited opportunities (Hitt, et al., 2001). Recognizing and exploiting opportunities contribute to the firm’s efforts to form sustainable competitive advantages and create wealth. Research streams have emerged to study an organization’s entrepreneurial activities both internally (e.g., Hornsby et al., 2002; Pearce et al., 1997) and externally (Morris et al., 2007; Kuratko et al., 2001; Zahra, 1991). Zahra (1991) observes that these activities may take place at the corporate, division (business), function, or project levels, with the unifying objective of improving a company’s competitive position and financial performance. Zahra’s observation has provided essential and useful guidance to corporate entrepreneurs for many years, but it may be incomplete, as the scope of corporate entrepreneurship is becoming wider (Phan et al. 2009). It overlooks the role that a company’s supply chain can play in its entrepreneurial activities. In the entrepreneurship literature, little has been written on the linkage between supply chain management and entrepreneurship (Handfield et al., 2009).

In the literature of supply chain management, the research on supply chain agility can be viewed as a linkage between supply chain management and entrepreneurship. Studies in this domain (e.g., Shane and Venkataraman, 2000) attempt to answer a compound question that
entrepreneurship scholars seek to address: why, when, and how are opportunities discovered and exploited? Supply chain agility is offered as a critical means for identifying and leveraging opportunities. Agility is comprised of two components: supply chain alertness and supply chain response capabilities (Li et al., 2008). Kirzner (1979) defines alertness as an individual’s ability to identify opportunities which are overlooked by others. Supply chain alertness highlights the opportunity identification capability of a firm’s supply chains. Supply chain response capabilities refer to the supply chain’s abilities to respond to and exploit the identified opportunities by reconfiguring supply chain resources. It is believed that the success of firms such as Wal-Mart and Dell lies in their supply chain agility (Supply Chain Leader, 2006), the result of integrating supply chain alertness and supply chain response capabilities.

In the SCM literature, some studies investigate the antecedents to supply chain response capabilities (e.g., Swafford et al., 2006); however, none has examined how to nurture supply chain alertness. Researchers have pointed out that a precursor of effective responses is alertness (e.g., Dove, 2005; Holsapple and Jones, 2005; Sambamurthy et al. 2003). In order to understand the linkage between supply chain management and entrepreneurship, we need to recognize that supply chain alertness is just as essential as supply chain response capabilities.

In the strategic management literature, social network theories have become central to alertness research. For example, Zaheer and Zaheer (1997) suggest that alertness emerges from the manner in which the firm uses its information network. Their testing results on data from the population of 4,088 banks strongly support the notion that alert banks use their information networks in ways that expand the range of information to which they are exposed. Alert and responsive banks tend to exercise greater market influence in industry. In the entrepreneurship literature, it has theoretically proposed that entrepreneurial alertness is associated with the
existence and use of an extended social network, but empirical testing has not been conducted yet (Ardichvili et al. 2003). Supply chain researchers are now actively importing concepts from the field of social network analysis to the research field of supply chain management (e.g., Borgatti and Li, 2009; Carter et al., 2007), but the relationship between information networks and supply chain alertness has not been examined.

We extend social network and entrepreneurship theories to supply chain management by investigating how supply chain managers use information networks to attain supply chain alertness. The pattern of an information network is conceptualized in terms of two dimensions: tie diversity and tie strength. According to Higgins and Kram (2001), an entrepreneurial information network has a pattern characterized with strong ties (i.e., frequent and direct interaction) from a wide range of nodes (i.e., across industries). In this paper, we investigate two types of information networks: the supply chain benchmarking network and the supply chain partner network. We contend that a firm with the pattern of entrepreneurial information networks in supply chain benchmarking and supply chain partnering enjoys higher supply chain alertness.

In addition, we explore the relationship between a firm’s supply chain alertness and the firm’s speed of new product development. New product development is considered to be a process of transformation of input information about customer needs and market opportunities into output (Krishnan et al. 1997). Reflecting firms’ capabilities to move quickly through the new product development process, new product development speed has become increasingly important for innovation management in organizations due to continuous reduction in product life cycle time and increase in competition from technological advancements and globalization (Chen et al. 2010). Prior research has implied that specific opportunity-detection practices, such as the integration of external suppliers into a new product initiative can speed up new product
development (e.g., Peterson et al. 2005). However, the literature provides little empirical support about the relationship between a firm’s overall opportunity-detection capability for its supply chains (i.e., supply chain alertness) and new product development speed. We address this research need theoretically and empirically. In particular, we argue that a firm’s degree of supply chain alertness is positively associated with its new product development speed.

In the next section, we introduce a typology of information networks and illustrate the concept of the entrepreneurial information network. In Section 3, we develop research hypotheses concerned with relationships among entrepreneurial information networks, supply chain alertness, and the speed of new product introduction. Section 4 describes our data collection, research methods, and results. We conclude with a discussion of contributions and limitations of this research, and suggest several future research directions.

**Information Network Typology**

A firm’s entrepreneurial processes, activities, and capabilities depend on the information and resources provided by its social networks (Anderson and Jack, 2002; Zaheer and Zaheer, 1997; Carsrud and Johnson, 1989). Alertness, an important entrepreneurial capability, arises from the manner that firms use their information networks to exchange what they think is happening in their business environment, for example, new market opportunities, best managerial practices, changes in supply and demand, and so on. (Zaheer and Zaheer, 1997). A firm’s positions in information networks are not entirely accidental. Firms can and do strategically influence their information networks (Burt, 1992).

To understand the influence of a firm’s information networks on supply chain alertness, we must first discuss the patterns of information networks that a firm can develop. This discussion centers around a typology for information networks we adapt from the work of Higgins and Kram
Although their typology was developed to understand mentoring in a current-career context, we argue that it applies to information networks in other contexts as well.

The information network typology is characterized by two network dimensions: network diversity and relationship strength. We will first explore the two dimensions before describing in detail network patterns yielded from the two dimensions.

2.1. The Dimensions of Information Networks

A firm’s information network has two dimensions: network diversity and relationship strength. Information network diversity refers to the range of social systems from which the focal firm (i.e., an ego node in social networks) draws and receives information for work. Relationship strength in an information network refers to the duration and frequency of communication among network participants. The two dimensions are also consistent with core concepts in social network theory and research (for reviews, see Brass, 1995 and Ibarra, 1993). The capacity for alertness comes not only from privileged and accurate information transferred through strong ties, but also from the availability of information that is sufficient in diversity and detail. The application of these two dimensions to supply chain agility is discussed next.

(1) Network Diversity

In social network research, the concept of network diversity concerns the extent to which the information provided by different participants in one’s network is not similar or redundant (Burt, 1983, 1992; Granovetter, 1973). The less redundant the information provided by an ego node’s network, the greater its access to valuable resources and information. There are two basic ways to define network diversity: 1) range, the number of different social systems from which relationships stem, and 2) density, the extent to which network nodes are connected to one another (Brass, 1995; Burt, 1983; Krackhardt, 1994).
Consider the following example to illuminate the premises of network range and network density. Suppose there is a focal firm whose information network spans organizational boundaries involving suppliers, distributors, third-party logistics providers, and customers. The range of this firm's information network is relatively high. In contrast, a firm’s information network with all ties from within the same organization has less range. Also, consider a focal firm that is a manufacturer and has ties to four different parties (i.e., alter nodes in social network); for example, a key supplier, a primary customer, a distributor, and a third-party logistics provider. If the four nodes are connected pair-wise with each other, then the firm's information network density is high. On the other hand, if there are no direct ties among the four alter nodes, the network density is low.

The more diversified the information network, the less redundant the information provided. Here, we adopt range as our specific conceptualization for network diversity: the number of different social systems from which the information ties originate. This is because it more closely captures the real-world environment for a firm’s supply chains: the four nodes in the manufacturer’s information network normally do not have working relationships with each other.

(2) Relationship Strength

Research from a variety of disciplines has shown that network actors bonded by strong ties tend to be highly motivated to collaborate with each other. In general, ties may be characterized as strong, weak or indeterminate (as with casual contacts or strangers). For the purpose of characterizing an information network, we consider a relationship continuum that ranges from weak ties (i.e. infrequent communication) to strong ties (i.e., frequent communication).
2.2. Patterns of Information Network

As illustrated in Figure 1, the two dimensions of an information network yield four distinct patterns of information networks: (1) entrepreneurial network (characterized by high network diversity, high network relationship strength); (2) opportunistic network (high network diversity, low network relationship strength); (3) traditional network (low network diversity, high network relationship strength); and (4) receptive network (low network diversity, low network relationship strength). In Figure 1, information providers are identified with S1, S2, S3, and S4 and the focal firm with F. Consistent with social network research, we depict the connections between the focal firm and its information provider with lines: solid lines for strong relationships and dotted lines for weak relationships (Burt, 1983). We use ovals to denote the boundaries of social systems.

< Insert Figure 1 here >

(1) Entrepreneurial information networks

The entrepreneurial network captures both the wide ranging nature of the information network (i.e., high network diversity) as well as the high strength of the ties. Burt (1992) shows that network configurations characterized with high network diversity can be valuable because they provide access to different sources of information. However, the value of the diverse ties cannot be realized if the information providers (S1, S2, S3, S4) are not motivated to help the focal firm (F) with its work. To yield the benefit of the entrepreneurial opportunities that can be provided by its diverse ties, the focal firm needs to have strong ties simultaneously with its information providers, because strong ties motivate individuals to act on behalf of a local person (Granovetter, 1982; Krackhardt, 1992). Empirical research has shown that strong ties exhibit the
highest levels of trust (Krackhardt, 1992) and are particularly helpful during times of uncertainty (Krackhardt and Stern, 1988). Thus, the key distinguishing feature of an entrepreneurial information network is that it is made up of heterogeneous information providers who are highly motivated to act on behalf of the focal firm and who collectively provide the focal firm with access to a wide array of work related information. This network is considered entrepreneurial because it translates into higher potential for product, process, and organizational innovations (Schollhammer, 1982; Kanter, 1985).

Social network researchers have pointed out that strong ties will lead to network density (i.e., network nodes are connected with each other) because people with whom an individual has strong ties will tend to be affiliated (Berscheid and Walster, 1978; Byrne, 1971). Such cases are found within bonded social systems, such as organizations. However, for an information network with information ties spanning organizational boundaries and emerging from different social systems, strong ties do not necessarily imply interconnection among them (Higgins and Kram, 2001). In other words, it is highly possible that strong ties from different social systems will not lead to network density. Therefore, relationship lines are not drawn to connect information providers (S1, S2, S3, S4) in entrepreneurial information networks (Higgins and Kram, 2001).

(2) Opportunistic information networks

The strength of relationships between information providers and the focal firm is what differentiates opportunistic information networks from entrepreneurial networks. The weak ties indicate low levels of reciprocity, infrequency of communication, and emotional distance. In the opportunistic case, the focal firm tends to refrain from reciprocating, communicating, or expressing itself fully. In other words, the information it accesses is opportunistic: the focal firm receives information only when the information is offered or when it asks for help from others,
on occasion. The distinguishing feature of an opportunistic network is the focal firm’s openness to receive information from multiple sources, yet assuming a passive stance toward actively initiating and cultivating such information exchange relationships.

(3) Traditional information networks

Traditional networks exhibit a clique-like structure comprised of interconnected strong ties (Burt, 1980). The term traditional is used because these ties come from the same social system (i.e., S1 and S2 are in the same industry). Given that the information providers are affiliated with the same social system, it is likely that there will be interconnection between them. Because traditional networks are less likely to be as large as either opportunistic or entrepreneurial networks, the traditional network is depicted as comprised of fewer network nodes than the other network patterns. In addition, because the information from a network of providers who belong to the same social system is likely to be redundant or highly similar, we expect to find relatively fewer differences in the types of information provided by a traditional information network compared to an opportunistic or entrepreneurial information network. The distinguishing feature of a traditional information network is the focal firm is open to receiving information from the same social system and takes a proactive stance toward actively initiating and cultivating such information exchange relationships.

(4) Receptive information network

The receptive information network is made up of weak relationships with participants belonging to the same social system. Given the similarity attraction hypothesis (Byrne, 1971), these weak ties in receptive networks are expected be interconnected. As in the traditional information network, the ego actor is more likely to receive similar information; yet unlike the traditional information network, the support provided is less likely to be strong. The
distinguishing feature of a receptive information network is the focal firm's openness to receiving information from the same social system, yet assuming a passive stance toward initiating or cultivating such information exchange relationships.

This four-pattern information network typology reveals the focal firm’s pursuit of information about new opportunities and challenges. A firm with an entrepreneurial network pattern has the best capability in harvesting valuable information relative to firms with other network patterns. In the next section, building on the insights from this information network typology, we examine a firm’s information network patterns for supply chain management and operations and how they are related to the firm’s supply chain alertness.

**Research Model and Hypotheses**

A firm’s supply chains are dynamic, specialized units that must maintain flexibility (Nichols et al., 1996). Each supply chain serves the evolving needs of a set of customers and thus must reconfigure, as needed, to stay aligned with changes in customer needs (Hauser et al., 1996). To identify those changes (opportunities/challenges) for its supply chain to address, we advance the proposition that a firm can establish two types of information networks in supply chain: the *supply chain benchmarking network* and the *supply chain partner network*. We then apply the concept of information network typology to these two types of supply chain information networks. In addition to hypotheses relating entrepreneurial information networks to the degree of supply chain alertness, we also hypothesize a relationship between supply chain alertness and new product development speed. Support for these hypotheses will give new insights into achievement of supply chain alertness and into the application of entrepreneurial concepts in the supply chain realm.
3.1. Supply Chain Benchmarking Networks and Supply Chain Alertness

A supply chain benchmarking network consists of firms with which a focal firm conducts benchmarking on supply chain management and operations. A benchmarking network is a learning network. Through benchmarking, a firm can generate new insights that have a potential for reshaping supply chain management processes and operational practices.

According to the information network typology introduced in the previous section, a supply chain benchmarking network can assume one of four patterns: entrepreneurial, opportunistic, traditional, or receptive. A firm can develop benchmarking ties with firms in the same industry. If the relationships are intra-industry and the ties are weak, then the firm has a receptive benchmarking network, and is likely to receive similar information from its receptive networks regarding supply chain processes and performance. In addition, the information provided through weak ties is limited in terms of information quality and quantity. This type of benchmarking network cannot cultivate alertness, which is achieved through the active maintenance of a superior network position that allows acquisition of private information (Zaheer and Zaheer, 1997).

A firm developing strong benchmarking ties with firms in the same industry (i.e., a traditional benchmarking network) is more alert to opportunities/challenges, compared with firms establishing a receptive benchmarking network. With strong benchmarking ties, the focal firm improves the accuracy of its perceptions about its supply chain management and performance levels in the industry. This enables the firm to have better strategic foresight and systemic insight. *Strategic foresight* is the ability to anticipate discontinuities in the business environment, including threats and opportunities in supply chains, the marketplace, and among competitors (Sambamurthy et al., 2003). The success stories of a variety of firms, such as FedEx
and Dell, testify to the role of foresight in shaping competitive supply chain operations. *Systemic insight* is vital for considering the complex interconnection among the firm’s capabilities and emerging opportunities (Sambamurthy et al., 2003). Systemic insight fosters the identification of entrepreneurial opportunities for supply chain operations. However, the low diversity of a traditional benchmarking network constrains the potential of the focal firm to identify opportunities through wide-range scanning. That is, the best supply chain practices may exist in other industries.

Through ties related to benchmarking, across industries, the focal firm can receive information from multiple sources. However, if these ties are weak a focal firm employs an opportunistic benchmarking network. According to Jacobson (1992), the opportunistic information network cannot yield superior private information, which is conducive to being alert to opportunities.

By building up strong benchmarking ties across industries, a firm forms an entrepreneurial benchmarking network. The strong ties in the network yield superior private information. Through the diversified ties in the network, the focal firm has wide-range scanning capability – receiving heterogeneous information (Higgins and Kram, 2001) on supply chain operations from the best of the best. Such information exchange enhances the focal company’s capability to make sense of competitive space and triggers knowledge about supply chain management and operations that is not easily imitated (Malhotra et al., 2005). Therefore, an entrepreneurial benchmarking network is believed to be the best network pattern among the others for a firm to proactively seek opportunities, and to attain a high degree of supply chain alertness. Thus, our first hypothesis reads:
**Hypothesis 1:** A firm employing an entrepreneurial supply chain benchmarking network enjoys a higher degree of supply chain alertness than firms with other patterns of supply chain benchmarking network.

3.2. Supply Chain Partner Networks and Supply Chain Alertness

Supply chain management and operations appear to be, at least in part, a social process. In the modern competitive environment, the ultimate success of a firm depends on its management’s ability to understand and integrate the company’s intricate network of business relationships in its supply chains (Drucker, 1998; Christopher, 1998; Lambert, 2008). Selecting parties with whom to align and then managing these choice relationships are among the most interesting research domains in business today (Lambert and Knemeyer, 2004).

Taking a social network perspective, we contend that, to achieve supply chain alertness, a focal firm should manage its supply chain partner network as an information network comprised of supply chain partners that are alert to opportunities and willing to share their information with the focal company. Henceforth, when we refer to a “supply chain partner network,” it should be understood that that we are focused on its informational aspects (i.e., its information network). Accordingly, a supply chain partner network conforms to one of the four patterns illustrated in the typology of Figure 1. We further contend that the specific pattern displayed by a firm’s supply chain partner network depends on how the focal firm selects its supply chain partners.

When a focal firm selects partners solely on transaction-by-transaction basis, the relationships formed in the focal firm’s supply chain partner network are arm’s length ties. Arm’s length ties are weak ties, because such ties are cool and atomistic, and actors are motivated by incremental profit seeking (Uzzi, 1997). Consider, for example, a manufacturer that only uses a supplier for one transaction because that supplier provides the lowest price. The information network derived from such a supply chain partner network is a receptive one. The
information transferred is either public knowledge or generic inventory information. Public knowledge is reported through standard instruments such as company reports, audited financial statements, regulatory filings, advertised bid and ask prices, price quotes, contractual stipulations, warranties, and other forms of prepared information accessible in the public domain (Uzzi and Lancaster, 2003). Generic, point-of-sale data or inventory status information exchanged in supply chain partner networks are tied to operational processes and provide little insight for strategic redirection. Arm’s length ties may promote exploitative learning through the collection and reporting of standard information that enables firms to enhance their current competencies and processes. However, such ties do not afford firms the capability to detect opportunities for innovation through restructuring their competencies and processes (Uzzi and Lancaster, 2003).

A focal firm can easily establish strong ties with its supply chain partners if that firm also uses the following criteria to select partners: open and honest communication, commitment to a longer term relationship, and responsiveness. Supply chain partners with those traits, showing the ability to understand and rationalize the focal firm’s intent, are important toward maintaining a good buyer-supplier relationship (Wu and Choi, 2005). The information network derived from a supply chain partner network composed of strong ties is a traditional one.

Malhotra et al. (2005) propose that strong ties between collaborative supply chain partners facilitate privileged, private information sharing between partners, hence enhancing opportunity detection. Privileged information can be related to a firm’s strategy, distinctive competencies, undocumented product capabilities, critical customer or supplier dependencies, and so forth (Uzzi and Lancaster, 2003). In addition, privileged information is specific to the receiving partners in terms of being proprietary and confidential. It provides the partner a unique
perspective not available otherwise. An example of the privileged information exchanges used in the research by Malhotra et al. (2005) is an optical electronics manufacturer’s effort to inform the channel about the timeframe in which a new product is going to be introduced and the associated transaction plan. The close collaborators (i.e., supply chain partners with strong ties) are given this information six months in advance, while the rest of the supply chain players are only given a month’s notice.

Once supply chain participants are engaged in a partner network, how much they can contribute to supply chain alertness is affected by the participants’ information network patterns. If a supplier has many strong boundary-spanning ties (i.e., strong connections to other parties from different industries outside the boundary of the supply chain partner network), we say this supplier has good relational capability. Compared to supply chain partners without boundary-spanning ties, supply chain partners with many boundary-spanning ties are more able to be alert and attend to new, divergent ideas sparked by outside connections to different networks (Kim et al., 2006). They are freer to take advantage of these ideas without the constraints of inertia (such as established network norms). Strong boundary-spanning ties facilitate the transfer of privileged information from a wide range of sources, thereby enhancing supply chain alertness greatly. Wu and Choi (2005) concluded in their case studies that a supplier with good relational capability is more likely to become a solution provider and, consequently, attains a larger share of supply responsibility from the buyer (i.e., the focal firm).

When a firm selects its supply chain partners based on open and honest communication, commitment to a longer term relationship, responsiveness, and relational capability, we say that this firm has an entrepreneurial type of supply chain partner network. An entrepreneurial supply chain partner network is characterized as employing rich media to extend highly complex and/or...
tacit knowledge, and capable of supporting extensive versus routine problem solving (Vickery et al., 2004). After all, much of the opportunity identification involved in entrepreneurial pursuits revolves around problem solving (Shane, 2000; Corbett, 2005).

Following the same argument, we have our second hypothesis:

**Hypothesis 2**: A firm employing an entrepreneurial supply chain partner network enjoys a higher degree of supply chain alertness than firms with other patterns of supply chain partner networks.

3.3. Supply Chain Alertness and New Product Development Speed

Firms that seek to compete through heightened supply chain alertness—an opportunity detection capability that is fostered by forming entrepreneurial information networks in benchmarking and supply chain partnering—will leverage this capability to gain competitive advantages. Alertness is the precursor of effective responses (Dove, 2005; Holsapple and Jones, 2005). New product development speed represents a firm’s effective responses to identified opportunities/challenges in the marketplace (Chen et al. 2010). New product development requires ready alertness to the instability, unpredictability, and heterogeneity of customer demands (Souder 1988). Deeds et al (1996) provide empirical support for the proposition that firms’ capability to continually tapping flows of knowledge / information is the premise of their new product development capability.

There are four basic stages in the total new product development process: business/market analysis, technical development, product testing, and product commercialization (Swink and Song, 2007). The speed of new product development is determined by the length of each stage. Supply chain alertness enables firms to shorten each development stage, hence increasing overall speed of new product development. Firms with a high degree of supply chain alertness is faster in the business/market analysis stage because they understand in advance the
new product’s place in the market relative to competition, and make connections between new product features and potential customers earlier than competitors. Compaq offers a good illustration (Lee 2004). In the 1990s, whenever Intel unveiled new microprocessors, Compaq took more time than its rivals to launch the next generation of PCs because of a long design cycle. The company lost market share because it was slow to get information on early adopters, those among its consumers who create the buzz around high-tech products. The lack of supply chain alertness caused Compaq to lose PC market share, until it was ultimately acquired by Hewlett-Packard in 2002.

The technical development stage of new product development transforms new product ideas into a physical product. In this stage, better decisions on product features, prototyping, and approving final designs come from cross-supply chain collaboration (e.g., Moffat, 1998). Supply chain alertness to different perspectives of supply chain partners plays an important role in product design collaboration (Lee 2004). TaylorMade Adidas Golf (TMAG) serves as a good example of how supply alertness can make a company more competitive. TMAG leaned on its supply partners when the company faced new equipment regulations for professional players in 2002, in essence making their assortment of high-performance clubs obsolete. The company’s supply chain reacted by turning out compliant clubs for tour professionals and consumers in merely twelve days (Goldsby and Garcia-Dastugue, 2008).

In the product testing stage, key customers and sites are selected, products and services are tested, and the results are analyzed. Supply chain alertness can shorten this stage by enabling firms to interpret test results and identifying problems quickly. Some firms employ a lead user method to gather the inputs on prototype products (Lilien et al., 2002). Just as early adopters offer insights in the idea generation phase, advanced users of the product or service are expected
to provide critical evaluation of prototype products and services before production enters full-scale volumes. Such implementation of user-innovators is found in an assortment of industries resulting in demonstrably improved sales and new product success (Franke et al., 2006).

The product commercialization stage involves all the activities required to launch the product including manufacturing and marketing planning, production ramp-up, and production promotion and distribution. Firms with a high degree of supply chain alertness can identify opportunities in a timely way to launch and ramp-up production to reach full scale, establish customer orders and sales locations, and fill the distribution channel with product. Austin and Lee (1998) have found that supply chain alertness heightened through extensive collaboration efforts across supply chains help companies in the PC industry ramp up fast enough in the production introduction phase.

Based on the above arguments, we present our third hypothesis:

**Hypothesis 3:** The firm’s degree of supply chain alertness is positively associated with the speed of new product development.

**Method**

4.1. Sample

Accurate measurement of network concepts requires high response rates from knowledgeable respondents. To ensure robust participation rates from appropriate contacts, we selected the sample firms and identified informants as follows. First, we selected organizations with which the research team had a relationship with their top supply chain executives, who could help us identify well positioned, informed contacts in their organizations for our research questions.
In an effort to qualify respondents, we sent a cover letter stating the research scope and purpose to the prospective respondents. After reading the cover letter, if the contact person did not regard himself/herself as well informed about the research topic, he/she referred us to the right person in that firm. Second, the research team conducted site visits and telephone interviews to explain the purposes of the study, to encourage participation, and, ultimately, to administer questionnaires during work time. Specifically, we told participants that a goal of this study was to help organizations design better supply chain management systems. We offered the participants an executive summary of research findings in return for their participation. All participants were assured that their participation was voluntary and were guaranteed confidentiality. When completing the interviews, informants could seek clarification if they were unsure of a question’s meaning. In turn, the research team could review responses on-site to ensure that data were not missing and respondents understood questions correctly. In sum, the research team obtained a sample frame consisting of 78 firms. The informants involved in the interviews were mostly senior supply chain managers and executives, with the balance consisting of division or company presidents.

The data for this paper were collected in two stages separated by one month and it took the research team over two years to finish data collection (September 2008 to December 2010). In the first stage, data about firm background, supply chain alertness, and new product development performance were collected. One month later, data about information networks (supply chain benchmarking network and supply chain partner network) were collected. The 78 firms represent over twenty different industries. The coverage of a diverse set of industries implies the generalizability of the research findings. The profile of sample firms and respondents is displayed by Table 1.
4.2. Measures

**Supply Chain Alertness:** Drawing upon literature review, we developed 9 items to measure supply chain alertness. Appendix 1 displays these 9 items. As reported in Table 2, Cronbach’s alpha and values of composite reliability are all quite high (i.e., well above 0.6), which indicate that the instrument is reliable. All of the nine items have squared loadings greater than 0.5, which provide strong evidence for convergent validity. Construct validity is achieved as the goodness-of-fit criteria (i.e., Chi-square test, the root mean square error of approximation (RMSEA), the Goodness-of-Fit Index (GFI), and Comparative Fit Index (CFI)) for the measurement model fulfill the recommended threshold values. Based on the validity test results, all the nine items were used in this paper.

**The Pattern of Benchmarking Networks:** We asked each firm with whom, how, and in what area they benchmark supply chain operations and performance. Based on what each firm provided (the list of their benchmarking subject firms, the benchmarking methods, and benchmarking contents), we coded each firm’s benchmarking network. We ‘operationalize’ tie diversity in terms of industry-spanning range and ‘operationalize’ the strength of a tie by the frequency of contact with the other party, per Granovetter (1973). Specifically, we regard a firm’s benchmarking network as characterized with high diversity if this firm benchmarks with firms within and across industries; we regard a firm’s benchmarking network as featured with strong ties if this firm benchmarks with other firms on a frequent basis (e.g., at least annually) through confidentiality arrangements regarding on-site learning of supply chain management and
operation practices. We code a firm’s benchmarking network as 1, if this firm’s benchmarking network displays the pattern of an entrepreneurial network which is characterized with high diversity and strong ties. We code other patterns of benchmarking networks as 0, such as a firm that benchmarks supply chain practices only with other firms within the same industry and on a random basis. Such a network is of the receptive pattern, having relatively low diversity (within industry) and weak ties.

Two members of the research team coded each firm separately. The inter-rater reliability is computed by taking the ratio of the number of agreements against the total number of observations (Miles and Huberman, 1994). Initially, the inter-rater ratio was about 95%. Although the inter-rater agreement greater than 0.65 is considered to be acceptable (Perreault and Leigh, 1989), the research team discussed discrepancies until complete consensus was achieved.

**The Pattern of Supply Chain Partner Networks:** We asked the respondents to describe how they select supply chain partners. We devised a coding schema to determine the two dimensions of a firm’s supply chain partner network. If a firm selects supply chain partners on a transaction-by-transaction basis and considers cost saving as the primary selection criterion, we classify the ties between the focal firm and its supply chain partners as weak. We classify ties between the focal firm and its supply chain partners as strong if a firm uses primary selection criteria of open and honest communication, commitment to a longer-term relationship, and responsiveness (rather than cost savings). If a firm selects a supply chain partner because of its relationship management capabilities within the confines of its industry (e.g., having relationships with other suppliers that have a proven track record only within the industry of the focal firm), we classify diversity of this firm’s supply chain partner network as low. If a firm selects a supply chain partner because of its relationship management capabilities both within and across industries
(e.g., having relationships with suppliers both within and across industries), we classify the diversity of this firm’s supply chain partner network as high.

Using this coding schema, we can assign a value to a firm’s supply chain partner network, based on the in-depth data collected. We code a network with high diversity and strong ties as 1, other patterns of network as 0. Initially, the inter-rater ratio was about 90%. Upon completion of discussion on discrepancies by the research team, consensus was achieved.

**New Product Development Speed:** New product development speed is measured by two items adopted from Sánchez and Pérez (2003) (see Appendix 1). Respondents rated the firm’s practice level of new product development compared to their primary competitors. Cronbach’s alpha is 0.627.

**Controls:** Firm size, environmental dynamism, environmental heterogeneity, and environmental hostility are control variables for this study. Compared to smaller companies, large companies may have more resources contributing to benchmarking and partner collaboration practices, such as specific personnel for benchmarking, and more influence in supply chain partner engagement due to large-volume purchases. We use number of employees to operationalize firm size and assess its potential influence.

The literature has shown that environmental variables are related with firm’s entrepreneurial behaviors (e.g., Miller and Friesen, 1982). The more dynamic and hostile (i.e., competitive) the environment, the greater the need for firms to be alert to challenges. Another environmental variable that may also be germane is heterogeneity. Firms operating in many different markets are likely to learn from their broad experience with competitors and customers (Miller and Friesen, 1982), therefore they are more alert to changes. In addition, firms in heterogeneous environments tend to have diversity in organizational personnel, operating
procedures, technologies and administrative practices (Peters, 1969), and are thus more alert to changes. We use the scale items developed by Miller and Friesen (1982) to measure environmental dynamism, environmental hostility, and environmental heterogeneity. Appendix 1 displays the items. Table 3 presents the reliability assessments of each construct. In every instance, the Cronbach alpha measure equaled or exceeded 0.6. Construct reliability therefore appeared to be acceptable.

< Insert Table 3 >

4.3. Data Analysis and Results

Data were analyzed in two stages. In the first stage, a correlation coefficient analysis was performed to evaluate the linear relationship among all variables in this study. Table 4 provides the means, standard deviations, and correlations for the study variables. In addition, we conducted factor analysis on the study variables as an assessment of discriminant validity. As indicated by Table 3, the factor loading pattern reveals that the study variables are distinct from each other. In the second stage, hierarchical regression analyses were conducted to test hypotheses concerning relationships between antecedents and supply chain alertness and the relationship between supply chain alertness and speed of new product development.

< Insert Table 4 here >

All hypotheses receive strong support with significant coefficient estimates. Table 5 displays the hypothesis testing results on the relationships between the pattern of information networks (i.e., benchmarking network and supply chain partner network) and supply chain alertness. Hypothesis H1 is supported (Beta = 0.205; p < 0.1). A firm with an entrepreneurial benchmarking network enjoys higher supply chain alertness than firms with other patterns of benchmarking networks. Hypothesis H2 is supported (Beta = 0.255; p < 0.05). A firm with
entrepreneurial type of supply chain partner network has higher supply chain alertness than firms with other network types. The difference of adjusted R-Square values indicates that 11% variance of supply chain alertness is explained by the network variables alone, evidencing that the effect of our predictors on supply chain alertness is impressive.

< Insert Table 5 here >

We also conducted one-way ANOVA post hoc analyses to compare entrepreneurial network with each of the other three information networks. The results are shown in Table 6. Although not every pair of comparisons has a statistically significant mean difference, we do see the pattern: firms with traditional network pattern have higher supply chain alertness than firms with receptive network; firms progressing toward opportunistic network pattern have higher supply chain alertness than firms with receptive patterns; firms with an entrepreneurial network have the highest supply chain alertness. The results also provide some support for our hypothesis 1 and 2.

< Insert Table 6 here >

The testing results for the relationship between supply chain alertness and speed of new product development are shown in Table 7. Based on these results, hypothesis H3 is supported. A firm’s supply chain alertness is positively and significantly related to the firm’s speed of new product development (Beta = 0.294; p < 0.05). The difference of Adjusted R-Square values (7%) also indicates that the contribution of supply chain alertness to NPD speed is important.

< Insert Table 7 here >

**Discussion**

This research examines the important role of entrepreneurial information networks for firms that seek to build up supply chain alertness (i.e., the capability to identify value-creation
opportunities for supply chain management and operations), and one dimension of the possible benefits from supply chain alertness: new product development speed. The results indicate that a firm with *entrepreneurial* information networks employed in benchmarking and partnering operations enjoys a higher degree of supply chain alertness; and supply chain alertness is positively related with the speed of new product development.

Empirical research on entrepreneurial capabilities has been challenged by difficulties of measurement due to the inherent problems in observing detailed internal characteristics of firms. Here, we describe and illustrate a unique way of characterizing a firm’s information network patterns to gauge the firm’s entrepreneurship orientation. The pattern of an information network is conceptualized in terms of two dimensions: tie diversity and tie strength. An entrepreneurial information network has a pattern characterized with strong ties (i.e., frequent and direct interaction) from a wide range of information suppliers (i.e., across industries). In this study, we examine two types of information networks: supply chain benchmarking network and supply chain partner network. As expected, a firm building up the pattern of an entrepreneurial information network in its benchmarking and supply chain partnerships enjoys a higher degree of supply chain alertness. The theoretical implication of this finding is that entrepreneurial capabilities (e.g., supply chain alertness) are driven by the firm’s propensity to build up its information networks entrepreneurially.

This research also explores the relationship between a firm’s supply chain alertness and new product development speed. Supply chain alertness is a strong predictor of new product development speed, thereby providing empirical support for the thesis that alertness is a precursor of effective operations to exploit opportunities (Dove, 2005; Holsapple and Jones, 2005).
This research extends the precepts of entrepreneurship to supply chain settings. Figure 2 displays the general framework used by researchers to address why, when, and how some individuals become entrepreneurs. This general framework is based on the combination of the Austrian School of economics (Kirznar, 1973, 1979) and cognitive psychology (e.g., Koppl, 2002). We can illustrate this framework briefly as: because of knowledge asymmetry (Austrian approach), personal differences [e.g., locus of control (Harper, 1998)], and beliefs, individuals vary in their ability to recognize opportunities. Opportunity recognition is the precursor of actions to exploit opportunities.

< Insert Figure 2 here >

We extend this framework to the study of supply chain entrepreneurship as indicated in Figure 3. The pattern of a firm’s information network for supply chain management and operations reveals firm differences in terms of knowledge, alignment among network members, and trust. These differences determine how alert a firm’s supply chain can be (i.e., its capability to detect opportunities). Supply chain alertness is an important precursor for firms that attempt to execute supply chain operations driven by opportunity exploitation. High speed in new product development is one of the possible benefits a firm can receive from leveraging its heightened supply chain alertness in opportunity-exploitation operations.

< Insert Figure 3 >

Limitations and Future Research

We recognize some inherent limitations in this study and opportunities they present for future research. For instance, although we diligently sought to control for response bias due to one-sided (manufacturer-centric) views of supply chain alertness, we recognize that the effect of such a bias may still persist. Future studies should collect data from the focal firm’s supply chain
partners (e.g., suppliers and/or customers) to ensure a balanced view. Also, because this is a cross-sectional study, we cannot comment on the effect of network change on supply chain alertness over time. To do that, a longitudinal study is needed. Further, outcomes other than new product development speed should be considered. Other competitive factors may include product/service delivery performance, innovation performance, customer satisfaction, loyalty, overall firm performance, and supply chain outcomes, among others. In essence, broadened examination of supply chain alertness is essential toward providing enhanced understanding of the phenomenon’s antecedents and consequences, its generalizability and implications for heightened firm and supply chain performance.

By combining research from three areas (social networks, entrepreneurship, and supply chain management), the proposed framework for supply chain entrepreneurship can be used to guide future research in many directions. From the network literature, in addition to tie diversity and tie strength introduced in this research, scholars can investigate how other network variables are related to supply chain alertness. For example, network embeddedness is the mechanism whereby an entrepreneur becomes part of the local structure and learns how to draw on and use the resources provided by available social capital (Anderson and Jack, 2002). Supply chain settings provide an opportunity for scholars to extend this idea from the traditional level of individuals to an inter-firm level by investigating the relationship between network embeddedness and supply chain alertness.

In the entrepreneurship literature, organizational rejuvenation is an important corporate entrepreneurship form by which the organization seeks to sustain or improve its competitive standing by altering its internal processes, structures, and/or capabilities (e.g., Peng et al., 2008; Lejeune and Yakova, 2005; Shi and Gregory, 1998). This phenomenon is sometimes referred to
as organizational renewal or corporate rejuvenation in the corporate entrepreneurship and competitiveness literature (e.g., Zahra et al., 2006). A firm’s supply chain management and operations are about managing complex work systems involving multiple hierarchical levels within a firm and horizontally spanning across firms. Supply chain entrepreneurship opens a new research domain that requires scholars to examine new processes, structures, and capabilities that enable a firm to rejuvenate its supply chains through opportunity identification and exploitation. This research made such an attempt by exploring how supply chain alertness, an entrepreneurial capability, is related to new product development speed, which involves supply chain rejuvenation activities. For future research, scholars can look at how supply chain alertness is related to make-to-order operations, lean and agile manufacturing, mass customization, and other operations methods seeking to exploit opportunities in the marketplace.

This research speaks to supply chain managers. It suggests to them that proactive establishment and use of information networks for supply chain management and operations can help them to access distinct, valued resources and competitive capabilities. Specifically, it underscores the need for firms to think about how to build benchmarking networks and supply chain partner networks as information networks. It also highlights the role of tie diversity and tie strength in the information networks in order to access rich information. The value of supply chain alertness is also clear. Supply chain alertness is an intangible, difficult-to-imitate capability for firms operating in a dynamic environment. Firms with high supply chain alertness can serve the customer better by customizing to their needs through expeditious product/service development and provision, yielding heightened competitiveness.
References


Shane, S., Venkataraman, S., 2001. The promise of entrepreneurship as a field of research.


Appendix 1
Measurement Items

Measurement Items for Supply Chain Alertness

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Literature Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>Monitor economies to detect new supply bases in a timely manner</td>
<td>Li et al. 2009</td>
</tr>
<tr>
<td>Item 2</td>
<td>Detect emerging demand trends in a timely manner</td>
<td>Li et al.2009 Christopher et al. 1997</td>
</tr>
<tr>
<td>Item 3</td>
<td>Detect unexpected changes in the relationship with key supply chain partners in a timely way (for example, a key supplier forms a partnership with your competitor)</td>
<td>Sambamurthy et al. 2003</td>
</tr>
<tr>
<td>Item 4</td>
<td>Identify new technologies for supply chain management in a timely manner</td>
<td>Li et al. 2009 Sambamurthy et al. 2003</td>
</tr>
<tr>
<td>Item 5</td>
<td>Detect misalignment between our company’s supply chain design and business objectives in a timely manner.</td>
<td>Sambamurthy et al. 2003</td>
</tr>
<tr>
<td>Item 6</td>
<td>Identify macro-economic changes (for example, exchange rate fluctuation, national regulation change) in a timely manner that affect our supply</td>
<td>Li et al.2009</td>
</tr>
<tr>
<td>Item 7</td>
<td>Detect unexpected changes in the information flow in our supply chains in a timely manner (for example, a key supplier or customer stops sharing information relevant to supply chain operations)</td>
<td>Lambert 2008 Sambamurthy et al.2003</td>
</tr>
<tr>
<td>Item 8</td>
<td>Monitor to detect unexpected disturbances/threats in carrying out supply chain operations (for example, accidents or a weather issue) in a timely manner that would affect our supply</td>
<td>Braunscheidel and Suresh 2009</td>
</tr>
<tr>
<td>Item 9</td>
<td>Detect unexpected changes in the goods/service movement throughout our supply chains in a timely manner</td>
<td>Lambert 2008</td>
</tr>
</tbody>
</table>


| Item 1 | The frequency of new product/service introductions to market                                                                                       |
| Item 2 | The cycle time of product development                                                                                                             |
Measurement Items for Business Environment (adopted from Miller and Friesen, 1982)

Please Answer the following questions for the industry that accounts for the largest % of your sales (in other words, your principal industry).

<table>
<thead>
<tr>
<th>Environmental Dynamism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item 1</strong></td>
</tr>
<tr>
<td><strong>Item 2</strong></td>
</tr>
<tr>
<td><strong>Item 3</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Heterogeneity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item 1</strong></td>
</tr>
<tr>
<td><strong>Item 2</strong></td>
</tr>
<tr>
<td><strong>Item 3</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Hostility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item 1</strong></td>
</tr>
<tr>
<td><strong>Item 2</strong></td>
</tr>
<tr>
<td><strong>Item 3</strong></td>
</tr>
</tbody>
</table>
Figure 1. Information Network Typology (Adapted from Higgins and Kram, 2001)

- Knowledge
- Personal differences
- Beliefs

Opportunity Recognition ➔ Action to Exploit Opportunity

Figure 2. A General Framework for Entrepreneurship

Pattern of Information Network ➔ Supply Chain Alertness ➔ Supply Chain Operation to Exploit Opportunity

Figure 3. A General Framework for Supply Chain Entrepreneurship
Table 1. Profile of Respondents

<table>
<thead>
<tr>
<th>SIC (2Digit)</th>
<th>Industry Profile</th>
<th>Number</th>
<th>Revenue Profile</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Construction - Special Trade Contractors</td>
<td>3</td>
<td>&lt; 20 mn</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>Food and Kindred Products</td>
<td>5</td>
<td>20 - 40 mn</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>Furniture and Fixtures</td>
<td>5</td>
<td>40 - 100 mn</td>
<td>7</td>
</tr>
<tr>
<td>26</td>
<td>Paper and Allied Products</td>
<td>4</td>
<td>100 - 500 mn</td>
<td>11</td>
</tr>
<tr>
<td>27</td>
<td>Printing, Publishing and Allied Industries</td>
<td>3</td>
<td>500 mn - 1 bn</td>
<td>13</td>
</tr>
<tr>
<td>28</td>
<td>Chemicals and Allied Products</td>
<td>12</td>
<td>1 - 5 bn</td>
<td>6</td>
</tr>
<tr>
<td>30</td>
<td>Rubber and Miscellaneous Plastic Products</td>
<td>3</td>
<td>5 - 10 bn</td>
<td>20</td>
</tr>
<tr>
<td>32</td>
<td>Stone, Clay, Glass, and Concrete Products</td>
<td>2</td>
<td>10 - 50 bn</td>
<td>4</td>
</tr>
<tr>
<td>34</td>
<td>Fabricated Metal Products, Except Machinery &amp; Transport Equipment</td>
<td>2</td>
<td>50 - 100 bn</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>Industrial and Commercial Machinery and Computer Equipment</td>
<td>10</td>
<td>&gt; 100 bn</td>
<td>3</td>
</tr>
<tr>
<td>37</td>
<td>Transportation Equipment</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Electronic equipment &amp; Components</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Construction and Mining Machinery and Equipment</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Apparel and Accessory</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>others</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Validity and Reliability Evaluation for Supply Chain Alertness

| Factor Loadings |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Item 1          | Item 2          | Item 3          | Item 4          | Item 5          | Item 6          | Item 7          | Item 8          | Item 9          |
| 0.549           | 0.694           | 0.670           | 0.574           | 0.727           | 0.520           | 0.714           | 0.812           | 0.772           |

<table>
<thead>
<tr>
<th>Evaluations of goodness-of-fit and reliability criteria of construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s alpha</td>
</tr>
<tr>
<td>Supply chain alertness&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Recommended values&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> For Chi-square test, p=0.061; <sup>b</sup>Schumacker and Lomax (1996) and Byrne (1998).
Table 3. Validity and Reliability Evaluation for Environmental Variables and NPD Speed

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item 1</td>
</tr>
<tr>
<td>Environmental Dynamism</td>
<td>0.841</td>
</tr>
<tr>
<td>Environmental Heterogeneity</td>
<td>0.522</td>
</tr>
<tr>
<td>Environmental Hostility</td>
<td>0.679</td>
</tr>
<tr>
<td>Speed of New Product Development</td>
<td>0.836</td>
</tr>
</tbody>
</table>

Table 4. Correlation Table

<table>
<thead>
<tr>
<th>Mean</th>
<th>S.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size</td>
<td>17050.06</td>
<td>53512.11</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamism</td>
<td>10.72</td>
<td>3.44</td>
<td>0.12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterogeneity</td>
<td>10.92</td>
<td>4.02</td>
<td>0.28*</td>
<td>0.41**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td>16.97</td>
<td>4.22</td>
<td>-0.01</td>
<td>0.3**</td>
<td>0.22</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCBN</td>
<td>0.25</td>
<td>0.44</td>
<td>0.24*</td>
<td>0.05</td>
<td>0.14</td>
<td>-0.07</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SCPN</td>
<td>0.25</td>
<td>0.44</td>
<td>0.31**</td>
<td>0.18</td>
<td>0.19</td>
<td>0.02</td>
<td>0.4**</td>
<td>1</td>
</tr>
<tr>
<td>SCA</td>
<td>42.22</td>
<td>8.86</td>
<td>0.34**</td>
<td>-0.1</td>
<td>0.16</td>
<td>-0.13</td>
<td>0.38**</td>
<td>0.39**</td>
</tr>
<tr>
<td>SNPD</td>
<td>9.76</td>
<td>1.87</td>
<td>0.24*</td>
<td>0.21</td>
<td>0.18</td>
<td>0.00</td>
<td>0.06</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Note: ** p < 0.01, *p<0.05
SCBN: supply chain benchmarking network; SCPN: supply chain partner network
SCA: supply chain alertness; SNPD: speed of new product development

Table 5. The Results for Benchmarking Network

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Supply Chain Alertness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>0.316**</td>
</tr>
<tr>
<td>Environmental Dynamism</td>
<td>-0.169</td>
</tr>
<tr>
<td>Environmental Heterogeneity</td>
<td>0.168</td>
</tr>
<tr>
<td>Environmental Hostility</td>
<td>-0.113</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
</tr>
<tr>
<td>Pattern of SCBN</td>
<td></td>
</tr>
<tr>
<td>Pattern of SCPN</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.122</td>
</tr>
<tr>
<td>F 4</td>
<td>3.719**</td>
</tr>
</tbody>
</table>

Note: *p < 0.1, **p < 0.05
SCBN: supply chain benchmarking network; SCPN: supply chain partner network
Table 6. The Results of Multiple Comparisons (Hochberg’s GT2\textsuperscript{a})

<table>
<thead>
<tr>
<th>(I) Supply Chain Benchmark Network Pattern</th>
<th>(J) Supply Chain Benchmark Network Pattern</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (No Benchmarking)</td>
<td>1</td>
<td>-1.205</td>
<td>3.268</td>
<td>1.000</td>
</tr>
<tr>
<td>N = 10 (Mean = 35.7)</td>
<td>2</td>
<td>-4.124</td>
<td>2.973</td>
<td>0.832</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>-1.400</td>
<td>4.796</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-9.350</td>
<td>3.140</td>
<td>0.038</td>
</tr>
<tr>
<td>1 (Traditional)</td>
<td>2</td>
<td>-5.787</td>
<td>2.525</td>
<td>0.216</td>
</tr>
<tr>
<td>N = 16 (Mean = 36.94)</td>
<td>3</td>
<td>-3.063</td>
<td>4.532</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-11.013</td>
<td>2.719</td>
<td>0.001</td>
</tr>
<tr>
<td>2 (Receptive)</td>
<td>3</td>
<td>2.724</td>
<td>4.324</td>
<td>1.000</td>
</tr>
<tr>
<td>N = 28 (Mean = 42.72)</td>
<td>4</td>
<td>-5.226</td>
<td>2.357</td>
<td>0.254</td>
</tr>
<tr>
<td>3 (Opportunistic)</td>
<td>4</td>
<td>-7.950</td>
<td>4.441</td>
<td>0.540</td>
</tr>
<tr>
<td>N = 4 (Mean = 40.00)</td>
<td>N = 20 (Mean = 47.95)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(I) Supply Chain Partner Network Pattern</th>
<th>(J) Supply Chain Partner Network Pattern</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Traditional)</td>
<td>2</td>
<td>-7.924</td>
<td>2.574</td>
<td>0.017</td>
</tr>
<tr>
<td>N = 14 (Mean = 34.79)</td>
<td>3</td>
<td>-5.881</td>
<td>3.145</td>
<td>0.328</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-12.305</td>
<td>2.733</td>
<td>0.000</td>
</tr>
<tr>
<td>2 (Receptive)</td>
<td>3</td>
<td>2.043</td>
<td>2.718</td>
<td>0.927</td>
</tr>
<tr>
<td>N = 31 (Mean = 42.71)</td>
<td>4</td>
<td>-4.381</td>
<td>2.223</td>
<td>0.274</td>
</tr>
<tr>
<td>3 (Opportunistic)</td>
<td>4</td>
<td>-6.424</td>
<td>2.869</td>
<td>0.155</td>
</tr>
<tr>
<td>N = 12 (Mean = 40.67)</td>
<td>N = 22 (Mean = 47.09)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a}Hochberg’s GT2 was used for the post hoc tests because homogeneity of variance is met and sample sizes are very different.

Table 7. Results of Regression Predicting New Product Development Speed

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>New Product Development Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>0.199*</td>
</tr>
<tr>
<td>Environmental Dynamism</td>
<td>0.181</td>
</tr>
<tr>
<td>Environmental Heterogeneity</td>
<td>0.063</td>
</tr>
<tr>
<td>Environmental Hostility</td>
<td>-0.063</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
</tr>
<tr>
<td>Supply Chain Alertness</td>
<td></td>
</tr>
<tr>
<td>Adjusted R\textsuperscript{2}</td>
<td>0.048</td>
</tr>
<tr>
<td>F</td>
<td>1.976</td>
</tr>
</tbody>
</table>

Note: *p < 0.1, **p < 0.05
Rural Economic Development and Small Business: A Role for the University

J. Robert Collins, Ph.D., Texas A&M University-Commerce

Abstract

Economic activity in rural areas is often declining and at best maintaining a status quo. In some cases where regional universities exist in rural areas there is opportunity for the university to expand its traditional role of education and research. With careful planning and relationship building, the university can develop and integrate a regional center for promoting economic development and supporting small business creation and growth. The author defines and examines such a region surrounding Texas A&M University-Commerce. The counties comprising the region are identified and profiled. Characteristics of the region are then summarized and presented. The author then identifies existing government resources, both local and state, and describes their functions and their legal limitations. Local government economic development resources are quantified and the operating characteristics of their governing bodies are assessed. This data is then used to define the building blocks for defining and proposing a model regional center for small business and entrepreneurship through the university and identifies roles derived from inherent existing university strengths.

Introduction – Evolution of the Regional University

Texas A & M University – Commerce is a member of the Texas A&M University System. It is a regional university that has been serving primarily North and Northeast Texas for well more than 100 years. (Texas A&M University-Commerce) After its founding in 1889, its roots developed similar to other nineteenth century teacher colleges that formed in the United States during that period. During the last half of the twentieth century the University began to transition into more than a teacher’s or “normal” college. For example in 1957 the university
name became East Texas State College, in 1962 it became East Texas State University after establishing its first doctoral program and it joined the Texas A&M University System in 1996 becoming Texas A&M University-Commerce. (CBE, 2013) In 1980, three colleges were formed for the University – the College of Business and Technology, the College of Arts and Sciences, and the College of Education. In 2011, four colleges were formed to reflect the growth of enrollment in non-education programs and to address the potential for growth during the twenty-first century.

Today’s regional university is typically structured with 3 – 5 colleges offering a variety of undergraduate and graduate degree programs. Often the structure will consist of a college of Liberal Arts, a college of Science, a college of Business, and a college of Education. There are variations to this, but the general structure is Arts or Liberal Arts, Science and Technology, Business, and Education. In some cases the technology component is included in an Engineering college or a combined Engineering and Science College. With the increasing interest, body of knowledge and course development in entrepreneurship, this educational emphasis is being added primarily to the colleges of business. This is the case with Texas A&M University-Commerce.

The question facing the regional university that has added entrepreneurship to its name is, “So what!” What do the entrepreneurship programs and courses look like? For the regional university such as Texas A&M University-Commerce the additional question is how does the university use this body knowledge and skill set to positively impact small business and entrepreneurship in the surrounding rural region? The following sections will address this set of questions.
The Region Served

The state of Texas consists of 254 counties, the largest number of counties of any state in the Union. The state and its counties are shown in Figure 1.

![Map of Texas showing counties](image)

Figure 1. The State of Texas consists of 254 counties.

The region of interest for purposes of this discussion is basically the northeastern quadrant of the state and specifically the 11 counties surrounding Texas A&M University-Commerce. This includes Hunt County where Commerce is located. Figure 2 provides further detail regarding the location of these counties.
The region of interest is now defined as the counties highlighted in Figure 2. These are listed as follows:

Hunt County (Where the University is located.)
Lamar County
Delta County
Hopkins County
Rains County
Van Zandt County
Kaufman County
Rockwall County
Collin County
Grayson County
Fannin County
It should be noted that neither Grayson nor Lamar Counties are exactly contiguous with Hunt County but are near enough, both geographically and otherwise to be treated as contiguous. Another graphic of the region is portrayed in Figure 3 below. Here the highways and road systems are overlaid on a map including the major cities and county seats in the 11 counties. A top-level assessment of the region shows that the counties on the western edge are relatively strong economically while economic strength decreases with movement eastward. In fact Collin County and Rockwall County are two of the strongest counties in the state economically and have long been among the fastest growing in the nation. However, since Rockwall County is the smallest in the state geographically, it’s growth is measured in percentages, not in raw numbers while Collin County’s growth can be compared either way.

Figure 3. Counties with Roads and Highways, County Seats, and Major Towns

The region is intersected by two basically east-west interstate highways (I20 on the South, and I30 central) as shown in Figure 3. It also is crisscrossed by a number of U.S. and State Highways and Roads (FM Roads) Note that western counties in the region (4) are part of the of the North Central Texas Council of Governments (NCTCOG), while counties to the
northwest (2) are part of the Texoma Council of Governments (Texoma COG), counties to the southeast (2) are part of the East Texas Council of Governments (ETCOG), and counties to the north and east (3) are part of the Ark-Tex Council of Governments (Ark-Tex COG).

A general conclusion is we have a diverse set of economies represented in the region as well as multiple councils of government. This will make the efforts to establish a sense of regionalism among this group of counties complex and time-consuming to accomplish.

The Economy of the Region

The Texas Association of Counties accumulates a large set of data which can provide clues to a county’s economic status. (Counties) The tables of data which follow represent some of the data for the counties in the region of interest and helps form some conclusions regarding comparative county economies.

Table 1 illustrates a basic set of demographic data for the region. The major growth counties are on the western edge as previously stated. Both Collin and Rockwall counties had rapid growth over the period 2010 to 2012 while Kaufman was somewhat less and Grayson was relatively slow-growing. Collin County has by far the largest population while Rockwall, Grayson, Kaufman, and Hunt counties form a second tier population-wise. The remainder of the counties has a population that is smaller and could be considered a lower tier. Note that the percent of the population that is older than 65 in the high growth counties is 11.1% or lower while in all the other counties it is significantly higher. A similar trend is seen in the median household income of the counties. The three high growth counties have a significantly higher median income than the rest.
Table 1. Basic Demographic Data for the Region

<table>
<thead>
<tr>
<th>County</th>
<th>Population Growth</th>
<th>Population 2010-12</th>
<th>Population 2012</th>
<th>Age &gt;65</th>
<th>Income Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collin</td>
<td>1.70</td>
<td>834,642</td>
<td>830,011</td>
<td>8.8</td>
<td>82.8</td>
</tr>
<tr>
<td>Rockwall</td>
<td>1.93</td>
<td>83,021</td>
<td>84.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta</td>
<td>1.00</td>
<td>5,329</td>
<td>5329</td>
<td>21.1</td>
<td>35.0</td>
</tr>
<tr>
<td>Fannin</td>
<td>1.08</td>
<td>33,831</td>
<td>17.9</td>
<td>40.0</td>
<td></td>
</tr>
<tr>
<td>Grayson</td>
<td>1.10</td>
<td>121,935</td>
<td>16.3</td>
<td>44.1</td>
<td></td>
</tr>
<tr>
<td>Hopkins</td>
<td>1.11</td>
<td>35,469</td>
<td>16.4</td>
<td>40.4</td>
<td></td>
</tr>
<tr>
<td>Hunt</td>
<td>1.14</td>
<td>87,079</td>
<td>14.7</td>
<td>47.4</td>
<td></td>
</tr>
<tr>
<td>Kaufman</td>
<td>1.50</td>
<td>106,753</td>
<td>11.1</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Lamar</td>
<td>1.03</td>
<td>49,811</td>
<td>17.6</td>
<td>38.7</td>
<td></td>
</tr>
<tr>
<td>Rains</td>
<td>1.20</td>
<td>10,943</td>
<td>22.4</td>
<td>40.6</td>
<td></td>
</tr>
<tr>
<td>Van Zandt</td>
<td>1.09</td>
<td>52,427</td>
<td>19.1</td>
<td>41.5</td>
<td></td>
</tr>
</tbody>
</table>

In Table 2 are presented some additional data which help lead to some concluding characteristics regarding the economies of the counties of our region. Again it is clear that our western counties are the strongest economically. Collin and Rockwall standout with respect to education level and un-employment rate while the eastern and southern counties have the lowest education percentages and some of the highest unemployment rates. Grayson and Hunt counties appear to have slightly higher wages and educational levels and could be classified as being in a
transition from no growth to higher growth. This is perhaps due to three factors: a solid industrial base; a local higher education presence; and, being located along major transportation corridors.

Table 2. Additional Factors Characterizing the Region

<table>
<thead>
<tr>
<th>County</th>
<th>$/Job</th>
<th>Rate (%)</th>
<th>Taxes ($M)</th>
<th>Capita ($</th>
<th>Density per Higher Ed. (%)</th>
<th>Higher Ed. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collin</td>
<td>54,719</td>
<td>6.1</td>
<td>179.0</td>
<td>214.46</td>
<td>930.0</td>
<td>92.8</td>
</tr>
<tr>
<td>Rockwall</td>
<td>35,569</td>
<td>6.2</td>
<td>27.0</td>
<td>325.52</td>
<td>616.6</td>
<td>91.3</td>
</tr>
<tr>
<td>Delta</td>
<td>25,678</td>
<td>7.6</td>
<td>1.8</td>
<td>330.18</td>
<td>20.4</td>
<td>84.2</td>
</tr>
<tr>
<td>Fannin</td>
<td>33,693</td>
<td>8.6</td>
<td>8.8</td>
<td>261.20</td>
<td>38.1</td>
<td>82.4</td>
</tr>
<tr>
<td>Grayson</td>
<td>37,991</td>
<td>7.2</td>
<td>32.6</td>
<td>266.98</td>
<td>129.6</td>
<td>85.2</td>
</tr>
<tr>
<td>Hopkins</td>
<td>34,700</td>
<td>6.0</td>
<td>8.9</td>
<td>251.60</td>
<td>45.8</td>
<td>78.7</td>
</tr>
<tr>
<td>Hunt</td>
<td>41,608</td>
<td>7.8</td>
<td>22.6</td>
<td>259.63</td>
<td>102.5</td>
<td>80.0</td>
</tr>
<tr>
<td>Kaufman</td>
<td>35,943</td>
<td>7.1</td>
<td>29.3</td>
<td>274.59</td>
<td>132.4</td>
<td>82.7</td>
</tr>
<tr>
<td>Lamar</td>
<td>35,319</td>
<td>9.0</td>
<td>12.1</td>
<td>243.75</td>
<td>54.9</td>
<td>82.4</td>
</tr>
</tbody>
</table>

New Orleans, LA October 2-4, 2013
Kaufman County is another transition county with population growth occurring due to cost of living favorability, its location along an interstate highway, and nearness to jobs in Dallas County. Lamar County has had very little population growth and cannot be considered a transition county but nevertheless has a strong industrial manufacturing base and a higher education presence. The remainder of the counties in the region would be considered primarily rural in nature with economic indicators less favorable than would normally be desired.

Figure 4 summarizes the trends indicated by the data. In the region of interest, the western counties are either established economic leaders or trending positive in economic development. Hunt, Hopkins, and Lamar counties have good potential due to location and/or established industrial bases. With the exception of the western counties in the region, all others can be considered rural. The dashed line in Figure 4 indicates the dividing point (or area) between the economically developed and rural areas of the region.
Economic Development and State Government

As in many states, the state government in Texas is involved on several fronts in promoting economic development and entrepreneurship. One area where this is occurring is at the local level through legislation that was passed enabling local communities to raise money for economic development purposes. Basically any community may hold an election to approve collecting a one-half cent sales tax to use for economic development purposes. The uses of the money is heavily restricted and there is an independent board of trustees appointed locally to manage the activity. However, the money may be used to promote and encourage entrepreneurship as a part of promoting local economic development. These entities, once enabled, are typically known as economic development corporations (EDC’s). A one-half cent sales tax doesn’t sound like much, but over a period of time it can accumulate to become a sizable fund for a small community.

One specific example of a small community in the region reveals an economic development fund in excess of $500,000. The population of the city is around 3,000 persons. This is not an isolated example, but is typical of the small, rural communities in the region. The larger cities in the region are very active in promoting economic development and are operating with resources much larger than the example above. The smaller cities have nice fund balances but not enough to recruit major company move-ins.

The previous statement has a hidden message. Most EDC’s are focused on attracting companies to locate in their communities. This is the typical approach and will continue to be. On a larger scale, however, this is a net-zero in terms of real economic development. In fact, the argument can be made it has an immediate negative impact. Our purpose is to encourage and
promote a shift in emphasis from transferring a company or installation to an emphasis on expansion and entrepreneurism. With respect to entrepreneurism this means diverting a small amount of the available EDC funds to promote the development of entrepreneurship and growth of new businesses within the region.

A New Role in the Region

Given the historic role of the University in impacting the Region and the State for education, given the expansion of the College of Business to include Entrepreneurship in its mission, given the capabilities and reputation of the College of Business, and given the status of economic development and entrepreneurship in the region, it is now time for the University to develop a strategy for positively impacting the region with respect to entrepreneurship and economic development. This strategy is proposed to result in establishing a Center for Small Business and Entrepreneurship for the University with the goal of utilizing University research and faculty strengths to promote the establishment and growth of small businesses in the region.

Some of the functions of the Center for Small Business and Entrepreneurship (CSBE) will include:

a. Information exchange and focused educational programs for small businesses

b. Promoting best practices for small businesses

c. Establishing resources for entrepreneurship including funding networks

d. Provide opportunities for faculty consulting and funded research

e. Serve as the focal point for entrepreneurs and small businesses in the region.
Some Beginnings

The College of Business and Entrepreneurship at Texas A&M University-Commerce has made beginning steps toward a final proposal and approval for the CSBE. With the sponsoring assistance of the major EDC’s in the region, an annual conference for entrepreneurs and small businesses was begun in 2012. This conference attempts to reach out to small businesses and entrepreneurs in the region and provide recognized experts and entrepreneurs to share experiences and knowledge. The response in the region has been increasing and expectations for the 2013 conference (3rd Annual) is to see an increased response again.

A second step toward establishing a functioning center is the development of a website for entrepreneurs and small businesses to utilize. This has also been accomplished with the development of the Global Entrepreneurism Laboratory (GEL). The GEL is currently located on the College of Business and Entrepreneurship’s web site and provides an extensive set of resources for the use of entrepreneurs and small businesses.

Concluding Thoughts

It is this author’s belief that the scope and role of the regional university is changing and, for that matter, must change. We must continue to focus on the historic university education while adapting to an age where our campus may be more virtual than geographic; where meetings and work activities take place virtually and real time, and where communication capabilities are convenient and fast. This means that we are ever more immersed in an education market place and must excel in our products to survive and grow. For our geographic regions to thrive, it becomes part of our mission to develop and convey to our larger “campus” the fast-
changing business practices, business ideas, and the methods and processes for developing and growing new businesses.

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http://www.tamuc.edu/aboutUs/historyTraditions/default.aspx

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SWOT Analysis for Individuals
Dr. C.W. VonBergen

Abstract

A SWOT (an acronym for Strength, Weaknesses, Opportunities, and Threats) framework is commonly used by organizations as part of their strategic planning process and assists firms in their decision-making, strategizing, and goal setting as they evaluate their internal strengths and weaknesses vis-à-vis external environmental threats and opportunities they face. Because of the success of SWOT analyses in business, this article encourages human resource professionals and employment counselors to consider SWOT analyses in which workers identify their strengths after evaluating their skills, knowledge, abilities, and experience. Persons are then asked to do the same for their weaknesses and which may place them at a disadvantage relative to others. They are invited to also examine career opportunities and then consider anything which might threaten such opportunities and list these separately. Factors to consider in using this popular organizational analytical tool with individuals are presented followed by a discussion of some misuses of SWOT analyses.

Introduction

Those with keen understanding of their strengths and needs are in much better position than those with limited or faulty self-knowledge. In such circumstances, I would hazard, accurate self-knowledge is worth at least 15 to 25 IQ points – and that’s a lot!

—Howard Gardner, Author of Frames of Mind

The world of work has become less predictable and more uncertain for organizations. To deal with this situation and to help ensure their survival and growth, firms have heightened their interest in strategic planning during recent years (Bateman & Snell, 2004). It is performed on regular basis by both profit and not-for-profit organizations and involves examining the
appropriateness of a business’s mission and for positioning an organization to deal with potential challenges in the future. Strategic planning is important because it can make a difference in how well a business performs. Such strategies become the plans for how firms do what they are in business to do, how they will compete successfully, and how they will attract and satisfy customers in order to achieve their goals.

In a personal context, individuals in their personal or professional life must also plan and consider what strategies will help them be successful and ensure their occupational survival. This is particularly important as researchers have noted that employees must take more control of their careers and look out for their employability (Callanan & Greenhaus, 1999). This emphasis has given rise to the protean (derived from the Greek god Proteus, who could change shape at will) or boundaryless career that is person driven (Briscoe, & Hall, 2006). Such a career is said to be reinvented by employees from time to time, as they and the environment change. Pursuing this career requires a high level of self-awareness and personal responsibility as suggested in the paper’s opening quote.

One strategic management planning technique widely used in industry and extensively taught in business schools is SWOT analysis which stands for strengths, weaknesses, opportunities and threats. It is a simple yet powerful model managers and business students use to analyze the strategic positions of companies, products, or business situations which enables proactive thinking, rather than relying on habitual or instinctive reactions. Unfortunately, this key tool in the strategic planning process has not been extensively used in career planning even though its self-assessment feature is an important step in most career development efforts. Hence, this article provides an in-depth review of this common organizational strategy framework and illustrates how this technique can be utilized by career development
professionals. This is done by first discussing strategic planning and SWOT analysis in business followed by its proposed use with individuals in career development contexts. Finally, problems arising from SWOT misuse are then discussed and a summary is provided.

**Strategic Planning**

Figure 1 presents six major components of the strategic management process (Bateman & Snell, 2004) often used in businesses: (1) establishment of mission, vision, and goals; (2) analysis of external opportunities and threats; (3) analysis of internal strengths and weaknesses; (4) SWOT (strengths, weaknesses, opportunities, and threats) analysis and strategy formulations; (5) strategy implementation; and (6) strategic control. These are briefly discussed below.

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**Step 1: Establishment of mission, vision, and goals.** The first step in the strategic planning is establishing a mission, vision, and goals for the organization. The mission is the basic purpose and values of the firm, as well as its scope of operations. It is a statement of the organization’s reason for existing. The mission statement also describes the key values by which the firm will operate. The vision of the firm moves beyond the mission statement to provide a perspective on where the company is headed and what the organization can become in the future. It is also important for managers to identify the current goals and strategies so that they have a basis for assessing whether they need to be changed.

**Step 2: Analysis of internal strengths and weaknesses.** The mission and vision drive the second component of the strategic management: analysis of the internal environment. Internal analysis provides strategic decision makers with an inventory of the organization’s skills, resources,
capabilities, and core competencies as well as its overall and functional performance levels. Any activities the organization does well or any unique resources it has are called strengths. Weaknesses are activities the organization does not do well or resources it needs but does not possess.

**Step 3: Analysis of external opportunities and threats.** At the same time the internal analysis is conducted, the external opportunities and threats facing the business are assessed. Opportunities are positive trends in the external environment; threats are negative trends. Once they have analyzed the environment, managers need to pinpoint opportunities that the organization can exploit and threats that they must counteract or buffer against. The combined internal and external analyses (Steps 2 and 3) are collectively called a **SWOT** analysis.

**Step 4: SWOT analysis and strategy formulation.** After completing a SWOT analysis, managers then formulate appropriate strategies. SWOT analysis helps executives summarize the major facts and forecasts derived from the external and internal analyses. Strategy formulation builds on SWOT analysis to utilize the strengths of the organization in order to capitalize on opportunities, counteract threats, and alleviate internal weaknesses. Strategy formulation moves from simply analysis to devising a coherent course of action.

**Step 5: Strategy implementation.** As with any plan, formulating the appropriate strategy is not enough. Strategic managers also must ensure that the new strategies are implemented effectively and efficiently. Prescient executives realize that clever techniques and a good plan do not guarantee success, and attention must be directed to implementation and execution.

**Step 6: Evaluating results.** The final component of the strategic management process is strategic control. This supports managers in evaluating the organization’s progress with its strategy and, when discrepancies exist, taking corrective action. As with all control systems, the organization
must develop performance indicators, an information system, and specific mechanisms to monitor progress.

Research has found a generally positive relationship between strategic planning and performance (Cho & Pucik, 2005; Nohria, Joyce, & Roberson, 2003; Roberto, 2004). Another reason strategic planning is vital has to do with the fact that managers in organizations of all types and sizes face continually changing situations. They cope with this uncertainty by using the strategic management process to examine relevant factors and decide what actions to take. Because the major thrust of this paper involves a review of the SWOT analysis, it is discussed in greater detail below.

**SWOT Analysis**

The idea behind a SWOT analysis is for managers in the firm to carefully assess both the opportunities and threats that exist in a firm’s environment and the strengths and weaknesses that exist within the organization. The managers then attempt to use the firm’s strengths to capitalize on environmental opportunities and to cope with environmental threats. Strengths are also used to offset weaknesses within the organizations. Ideally, a SWOT analysis helps a company determine how to increase internal strengths and minimize internal weaknesses while maximizing external opportunities and minimizing external threats. Generally, a SWOT analysis serves to uncover the optimal match between the internal strengths and weaknesses of a given firm and the environmental trends (opportunities and threats) that the business must fact in the marketplace. This is accomplished by assessing how strengths may be leveraged to realize opportunities and how weakness, which exacerbate threats or impede progress, may be overcome (Hofer & Schendel, 1978; Thompson & Strickland, 1998).
The SWOT framework was developed by Learned, Christiansen, Andrews, and Guth (1969) from earlier efforts at the Harvard Business School to explore case studies. Classified as the key component of the Design School of Strategy by Mintzberg, Ahlstrand, and Lampel (1998), the SWOT analysis quickly became the standard approach to analyzing internal and external organizational environments. The SWOT has essentially remained unchanged even though many models and frameworks have emerged. It is considered by some to be the most important and remains perhaps the most well-known strategic planning tool (Dyson, 2002; Hindle, 1994). This tool helps examine the organization’s current performance (strengths and weaknesses) and the organization’s future (opportunities and threats) by accounting for the factors that exist in the external environment.

According to Barney (1995), SWOT is a simple framework that points to the importance of external and internal forces for the purpose of understanding the sources of competitive advantage. It is a preliminary analytical tool that must be supplemented with rigorous competitive, resource, financial and organizational analysis. SWOT helps decide whether the main problems facing an organization revolve around a need to revise strategy, a need to improve strategy implementation, or both. SWOT can be a rich and prompt tool that helps explore new possibilities and initiate new programs (Chermack & Kasshanna, 2007). It is a dynamic process for decision-making and is actually a form of brainstorming in that it looks at future possibilities for the organization through a systematic approach into both positive and negative concerns (Balamuralikrishna & Dugger, 1995). When used properly, SWOT analysis can help find the best match between environmental trends (opportunities and threats) and internal capabilities. An effective strategy is one that takes advantage of the organization’s
opportunities by employing its strengths and wards off threats by avoiding them or by correcting or compensating for weaknesses.

**SWOT and Career Development**

While SWOT is a powerful and oftentimes highly successful technique with respect to organizations, it may also be valuable when applied to individuals and their careers (David, 1997). Careers have increasingly become boundaryless (Nauta, Van Vianen, Van der Heijden, Van Dam, & Willemsen, 2009); more boundaries (e.g. occupational, departmental, and organizational) are crossed in comparison with earlier and more predictable hierarchical careers (DeFillippi & Arthur, 1996; Gunz, Evans, & Jalland, 2000). Hence, employees need to be focused on their adaptability for attaining a job within or outside their organization. As such, employability has been considered an alternative to job security (Forrier & Sels, 2003) and refers to the likelihood of obtaining and retaining a job (DeCuyper, Van Der Heijden, & Wittekind, 2012). It is considered a critical requirement for individuals who aim for career success (Fugate, Kinicki, & Ashforth, 2004; Van der Heijde & Van der Heijden, 2006).

More and more career development systems focus on employability (Bernardin, 2003) and individuals are advised not to worry about holding onto a specific job, but rather they should make sure they have developed the competitive skills needed in the marketplace. They need to have portable competencies (Arthur, 1994). One way to help ensure that this happens is to implement a strategic management process at the individual level.

Self-assessments are usually among the first techniques implemented by organizations and individuals in their career development efforts (Gutteridge & Otte, 1983). A personal SWOT analysis involves a combination of a self-assessment tool and a strategic planning activity.
Typically, individuals completing self-assessment exercises for career-planning purposes go through a process where they think through their life roles, interests, skills, and work attitudes and preferences. Following such a situation analysis they then try to plan their short- and long-term goals, develop action plans to meet those goals, and identify any obstacles and opportunities that might be associated with them.

For an individual, this process means matching their strengths and weaknesses with occupational opportunities. In other words, the person wants to pursue occupational jobs, and a career that capitalize on his or her interests, aptitudes, values, and skills. He or she also wants to choose occupations, jobs, and a career that make sense in terms of projected future demand for various types of occupations. The consequences of a bad choice, or of no choice, are too severe to leave to others or luck. Luck, as someone once indicated, comes to those who are best prepared.

**Personal SWOT Self-Assessment**

Figure 2 provides a convenient template for a personal SWOT analysis. Note that for each of the four areas (strengths, weaknesses, opportunities, and threats) there are examples to start the self-evaluation. Of course, the SWOT analysis is performed in light of an individual’s personal mission statement (see Douglas, 1994; Rabow, Wrubel, & Remen, 2009) and his or her strategic vision of where they see themselves headed and what they hope to become in the future. The vision clarifies the long-term direction the individual would like to pursue. A discussion of these four areas is now presented.

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Insert Figure 2 about here
(1) Identify one’s strengths

Here individuals should ask themselves which personal attributes will help them to achieve their objective, in other words, what are the things that set them apart from other job applicants? Strengths can be viewed as a resource that allows individuals to achieve their defined goals and should be carefully weighed in light of the current and expected work environment. Strengths identify what one does better than others in the workplace/school.

These strengths could include one’s work experience, academic background, specific technical competencies, personal characteristics (e.g., ability to work in a team, one’s communication skills, and the ability to work under deadline pressure), one’s business contacts, one’s language skills, etc. Here it is important to see oneself through the eyes of the prospective employer.

Once a person has identified these key attributes, they should figure out how they will help them to make a success of this specific position. The idea is then to sell these strengths during an interview. According to management guru, Peter Drucker (2005), the only way to discover one’s strengths is through feedback analysis. He suggests that whenever a person makes a key decision or takes a key action that they write down what they expect will happen. Nine to 12 months later, compare the actual results with one’s expectations. Practiced consistently, this simple method will show a person within a fairly short period of time where your strengths lie—and this is of utmost importance to know. The learning point here is for one to concentrate on their strengths. Drucker (2005) suggests, “Put yourself where your strengths can produce results” (p. 102).
(2) Identify one’s weaknesses

Now individuals should ask themselves what they could improve and what they should avoid and what others are likely to see as weaknesses. They are limitations, faults, or defects in the person that impedes progress toward defined goals. Weaknesses are critical in that these are areas in need of improvement—those areas that should be addressed in training opportunities or future job positions where these skills are needed might be acquired or fine-tuned.

Weaknesses are matters that a person can control. Examples of weaknesses include lack of work experience, an inappropriate academic background, lack of technical skills, lack of interpersonal skills (e.g. lack of leadership skills or team-management skills), and negative personal characteristics (e.g. impatience, lack of empathy, or lack of discipline).

If a person finds it difficult to identify their weaknesses, it could help to go through their previous performance appraisals. A colleague that they trust and respect might also be able to help—even though this could be a painful exercise. Additionally, in assessing one’s weaknesses it may be important to keep in mind the Stockdale paradox. In his best-selling book, Good to Great (2001), Collins, noted that superior companies practice this mind-set. The Stockdale Paradox is named after admiral Jim Stockdale, who was the highest ranking military officer held captive for eight years during the Vietnam War. Interestingly, Admiral Stockdale indicated that it was always the most optimistic of his prison mates who failed to survive: “They were the ones who said, ‘We’re going to be out by Christmas.’ And Christmas would come, and Christmas would go. Then they’d say, ‘We’re going to be out by Easter.’ And Easter would come, and Easter would go. And then Thanksgiving, and then it would be Christmas again. And they died of a broken heart” (Collins, 2001, p. 84).
What these optimists failed to do was confront the reality of their situation. They preferred the ostrich approach, sticking their heads in the sand and hoping that the difficulties would just go away. That self-delusion might have made it easier on them in the short-term, but when they were eventually forced to face reality, it had become too much and they could not handle it. Stockdale, on the other hand, confronted the worst aspects of his current status along with an optimistic faith: “You will prevail in the end, regardless of the difficulties. AND at the same time… You must confront the most brutal facts of your current reality, whatever they might be” (Doherty, n. d.). The Stockdale Paradox suggests that individuals be ruthlessly honest in identifying their weaknesses yet maintain a faith that they can achieve their personal goals. Being candid about oneself was also emphasized in Atlas Shrugged (Rand, 1957): “Nobody stays here by faking reality in any matter whatever” (p. 794). Thus, individuals are advised to adopt an unyielding discipline to stop doing anything and everything that does not fit tightly with their development and craft a “not to do” list to address weaknesses.

Once a person has a picture of their weaknesses, they can start working on ways to improve on them. It may be too late for this specific interview, but enrolling for that computer or project-management course may be just what might be needed to get the next job they apply for. The more challenging analysis of opportunities and threats requires an examination of major external forces that may impact the individual (e.g., the scientific, technological, marketing, cultural, and attitudinal trends). Some of these changes represent opportunities, and some of them represent real threats to the person.

A caveat, however, was noted by Drucker (2005) with respect to strengths and weakness. He suggested that individuals focus little effort on improving areas of low competence. “It takes far more energy and work to improve from incompetence to mediocrity than it takes to improve
from first-rate performance to excellence. And yet most people—especially most teachers and most organizations concentrate on making incompetent performers into mediocre ones” (p. 102). Energy, resources, and time should go instead to making a competent person into a star performer; i.e., work on improving one’s strength’s.

In summary, the best answer seems to be to build competencies and rehabilitate weaknesses, as neither approach alone suffices. Indeed, McCall (2009) may have the final word: “Developing leaders with the breadth and experience to handle the complexity of organizations in today’s global world simply requires an investment in helping those with talent shed what no longer serves them (both strengths and weaknesses) and continually acquire the new skills that they need” (p. 54).

(3) Identify the external opportunities

A key question to be addressed in this quadrant in Figure 2 is what opportunities exist in a person’s (projected) career field? Which external conditions are helpful in achieving one’s objective? Opportunities are the possibilities that an individual might take advantage of and pertains to forces in a person’s operating environment that might increase demand for what the person can provide or allows the individual to provide it more effectively. For example, reading about future likely trends in the industry might help to recognize which direction one might move in.

These are opportunities that an individual does not have any control over, but which can be to their advantage. A person may find that a certain career field is particularly in need of their set of skills, that few people are willing to work in the specific geographical area where they are applying for the job, that the country’s affirmative-action strategy counts in one’s favor, etc. Potential opportunities are evaluated in terms of how well they “fit” key concerns of the
individual such as prejudices, preferences, lifestyle considerations, risk inclinations. This will involve “due diligence” on the part of the person.

It may be also helpful to attend to the following key trends (Snell & Bohlander, 2013):

- Economic factors and development information, including general, regional, and global condition;
- Industry and competitive trends including new processes, services, and innovations;
- Technological changes, including information technology, innovations, and automation;
- Government and legislative issues, including laws and regulatory changes and administrative rulings;
- Social concerns, including child care, elder care, the environment, and educational priorities; lifestyle modifications, and
- Demographic and labor market trends (e.g., labor shortages), including the age, composition, and literacy of the labor market, and immigration.

Individuals should start working on ways in which to exploit each opportunity. It might even be a good idea to discreetly point out these facts in a job interview.

(4) Identify the external threats

External threats are conditions, barriers, or constraints that limit or those that are harmful to achieving a person’s goals or objective/s. These are things that a person doesn’t have any control over. However, if one is clever, they may be able to lessen their negative effects.

Examples of external threats include a market saturated with candidates who share a person’s set of skills and competencies, competitors with superior skills, experience, knowledge,
competitors who went to schools with better reputations, affirmative-action strategies that count against a person, downsizing in one’s field due to obsolescence of the profession (e.g. factory workers that are replaced by machinery), etc. What has typically been found to be effective, based on SWOT input, is a strategy that takes advantage of the person’s opportunities by employing his or her strengths and by proactively addressing threats by correcting or compensating for weaknesses. It is important to recognize strengths can be viewed as weaknesses and opportunities can contain hidden threats as well. Therefore, it is helpful to ask questions such as: ‘How might this threat also be an opportunity?’ and ‘Does this opportunity contain threats as well?’ Also, ‘How might this strength turn out to be a weakness?’ Answers to such questions may give individuals new insights into choosing appropriate strategies and promote innovative ways of thinking about known issues in new ways (Thompson, 1993). Additionally, it is advised that individuals engage significant others in performing a SWOT analysis for themselves. It may be helpful for individuals to ask key people in their lives (e.g., spouse, partner, boss) to complete a SWOT analysis evaluating them.

Overall, the intent of SWOT is to capitalize on the strengths, address weaknesses, take full advantage of opportunities, and minimize the impact of threats. SWOT should therefore be used to identify issues that are considered key to the individual’s present and future performance (Hill & Westbrook, 1997). These critical issues must be clear and followed carefully through the planning, development and review of any program, plan, or decision (Koch, 2000; Thompson, 1993).

**Discussion**

A SWOT analysis is a strategic business tool that can be applied equally powerfully to individuals. In some ways, completing a personal SWOT review is to ask a person to treat their
career as a business and themselves as a competitive product. This paper illustrates how a classical strategic management technique—SWOT analysis—can be adapted for individuals to help introduce change in their lives and to take critical personal decisions to enhance their career objectives. A SWOT analysis will be most helpful if it is used to support the vision, mission, and objectives a person has already defined. The SWOT will at least provide perspective, and at best will reveal connections and areas for action. Hollingworth (2002), for example, has encouraged individuals to undertake a SWOT analysis of themselves as managers and found that individuals developed an improved level of self-awareness and often real change in their attitude or behavior. SWOT is not the only self-assessment technique a person can use, but it is one with a long track record of effectiveness.

The comfort level of many workers and business students with using SWOT analyses in their firms often lowers their resistance to doing some interesting self-analysis and legitimized their decisions and new lifestyle and career choices. A personal SWOT analysis should be taken into consideration when creating a career development plan. The input from the SWOT analysis can be used to match one’s strengths with opportunities in the future workplace and to identify those areas where training and development are needed. This should be conducted on a regular basis to ensure that one’s portfolio of competencies is constantly being updated to meet the challenges of the changing business environment. Another excellent time to utilize a SWOT analysis is every time an individual applies or interviews for a new position. Going through this exercise can help a person be prepared for the interview and get them ready to answer tough questions from interviewers (e.g., “Describe your biggest weakness”). Following this process also allows one to anticipate areas that could be potential issues during the interview. Yet another time to initiate a SWOT analysis was suggested by Steve Jobs, in his 12 Rules of Success (n. d.).
He recommended that people perform a SWOT analysis when they join/start a company to take control of their own career development. Nevertheless, SWOT may have some drawbacks.

**Misuse of SWOT**

Yet for all its simplicity, SWOT can be used poorly. Hill and Westbrook (1997) and McDonald (1999) suggested that SWOT analyses often yielded only shallow extemporaneous data that are as likely to detract from critical issues, themes, and thrusts as illuminate them. Another problem cited is that SWOT is sometimes used to justify a previously decided course of action rather than used as a means to open up new possibilities (Koch, 2000). SWOT has also been criticized for giving the option for people or organizations to look for strengths that match opportunities yet ignore those opportunities that cannot be used to their advantage. A related drawback is that it might not encourage openness to new possibilities since SWOT usually overemphasizes one’s current position. Additionally, various investigations (Hill & Westbrook, 1997) showed that SWOT is often looked upon as a basic analytical structure only, or used as a way of launching a wide-ranging group discussion about a company’s strategic position and not linked to any subsequent strategic planning application. The failure to link outcomes of SWOT exercises to the rest of the planning system has been suggested as the primary misuse of the SWOT tool (Chermack & Kashanna, 2007). This failure reduces SWOT analysis to a mere conversational tool—little more than a topic of discussion. In short, SWOT’s ease of use often leads to its misuse. Moreover, Mintzberg (1994), David (1997) and many others suggest that SWOT is the main cause of what is considered an excessive formalization of the strategy making process. Finally, while SWOT analysis is widely used in business and thus providing anecdotal evidence of its utility and success as a strategic management instrument, it has also been
criticized for lacking a body of solid theory and research testifying to its effectiveness (Hill & Westbrook, 1997).

Despite these shortcomings, workers who maintain their employability must make a habit of self-assessment and scanning their environments for information that may lead to occupational opportunities and avoid career-limiting threats. SWOT provides such an organizing framework that has remained relatively unchanged since its development over 40 years ago. Because the SWOT procedure is widely taught in business schools and practiced in numerous businesses as part of their strategic planning process, many individuals are familiar with this analysis which will facilitate its adoption by individuals in a career development context.

Of course, career planning should not stop with a SWOT analysis. It is important to develop actions for moving forward. A SWOT can be helpful in creating a plan to take action, keeping in mind the goals to be achieved or the desired end state to be reached. It should, therefore, be used to identify issues that are considered key to individuals’ present and future performance.
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The Chamber of Commerce: It’s Role in Small Business and the Local Community

Dr. Kenneth J. Lacho, The University of New Orleans
Dr. Erich N. Brockman, The University of New Orleans

Abstract

This paper addresses an area with very little extant literature, the role of the modern day chambers of commerce in local business environments. What do chambers do? How do they help small businesses? What role do they play in local community and economic development? The combined experience of the authors with a local metropolitan chamber of commerce illustrates the various roles played by a chamber. Five roles fit into the following categories: business promotion; owner skill development; government relations; community development; and, economic development. Although, this exploratory research may have limited generalizability, ultimately it is hoped hope to encourage future research that may lead to the development of a theory supporting the connection between a chamber of commerce and local businesses.

Introduction

As long as people have conducted trade, they have banded together to provide common protection against enemies, develop rules to govern the conduct of trade, and to promote their businesses (Morro Bay, n.d.). These collective efforts became more formal as guilds developed in medieval cities and town life ( Guilds in the Middle Ages, n.d.). Over time, guilds evolved into modern day trade associations and chambers of commerce.

The concept of a chamber of commerce first appeared in Europe at the end of the 17th century. The earliest locally-based chamber in North America was established in Charleston,
South Carolina in 1772 (Morro Bay, n.d.). Today there are 2,800 state and local chamber chapters and 3,000,000 business members in the U.S. (U.S. Chamber of Commerce, n.d.).

**Purpose**

This paper illustrates the role of the modern day chamber of commerce in its local business environment. What do chambers do? How do they help small businesses? What role do they play in local community and economic development?

**Literature Review**

Chambers of commerce are an important force in any community, large or small, yet little academic research has been done on them. Studies include one by Dawley, Stephens, and Stephens (2005) who studied the multi-dimension ability of organization commitment of volunteer chambers of commerce board members. Modeling was used to examine the affects of organizational commitment on several critical roles the board member is to perform. Study results showed that normative, affective, and continued commitment based on few alternatives had a positive effect on the role of board members. Another study by Lacho, Bradley, and Cusack (2006), investigated the role of business nonprofit organizations in helping with the survival of small businesses in the New Orleans Metropolitan Area in the aftermath of Hurricane Katrina. The business nonprofits, including three chambers of commerce, made extensive use of email in communicating with their members as well as holding workshops on disaster relief topics such as the U.S. Small Business Administration loan programs and insurance. Cooperation or partnering on events with government economic development agencies was carried out. Lacho (2008) studied the government affairs activities of four chambers of commerce in suburban New Orleans (2008). In addition, Lacho and Brockmann (2011) examined how a chamber can be used to promote one’s small business. How a chamber’s educational opportunities can help the small
business owner improve his or her business skills was explored by Lacho and Brockmann (2012). College student knowledge of chambers of commerce was found to be poor as studied by Fok, Lacho, and Brockmann (2013).

Last, the Schapiro Group (2007) studied if consumers really patronized businesses because they are chamber members. Data came from a scientific web-based survey of 2,000 adult consumers nationwide. Their findings showed if consumers know that a small business is a chamber member the chamber enjoys a 44% increase in consumer favorability rating and a 63% increase in the likelihood that consumers would patronize the business in the future.

**Background**

Chambers of commerce are present all over the United States from small towns such as Cisco, Texas to St. Louis, Missouri, to Jefferson Parish, a suburb of New Orleans, Louisiana. Chambers range in size from a few dozen members to those with more than 20,000 (Wahl II, 2010).

This study is an exploratory case and is not generalizable to the general population of chambers of commerce. Also, the study serves as an impetus to future research studies of chambers of commerce, a topic which has been neglected by academic researchers.

The subject of this paper is the Jefferson Chamber of Commerce located in Jefferson Parish (county), a suburb of New Orleans, Louisiana. It was founded in 1997 and is a private nonprofit, membership driven organization with a 501 ©3 IRS designation. The Chamber has over 1000 members and is managed by a 73-member voluntary Board of Directors and 17 non-voting community representatives. A president and eight staff members manage the day-to-day affairs of the chamber.
The Jefferson Chamber of Commerce has nine primary standing committees. They are Business Development and Growth, Communications, Education, Government, Membership, Special Events, Diplomats, Community Affairs, and Leadership Jefferson.

**Research Methodology**

An exploratory study format was used given the very early stages of any theory development concerning relationships between chambers of commerce and small business owner members (Siggelkow, 2007). Such a method is applicable to the current situation because of the lack of significant studies and because it allows for richer data (Eisenhardt & Graebner, 2007; Eisenhardt, 1991).

The primary sources of data come from the observations and involvement of the authors as members of the Jefferson Chamber of Commerce, and previous studies. The authors have a combined membership exposure of over twenty years. Currently, they serve on the Chamber’s Business Growth and Development committees as well as attending the many functions of the Chamber.

**Limitations**

This study is an exploratory case study of a single chamber of commerce and limits the generalizability of the findings to the population of chambers of commerce (Eisenhardt & Graebner, 2007; Eisenhardt, 1991). Obviously there are differences among the many chambers of commerce. There is no intent to suggest that chambers throughout the United States behave the same as the one described in this study.

The impact of the external environment on the Jefferson Chamber is not part of this study. Such factors as urban versus rural, local economic conditions, geographic, socio-cultural,
employment levels and the dominant nature of the local economy, e.g., tourism, manufacturing, a
distribution center are not considered as part of this study.

Findings

The role of the Jefferson Chamber of Commerce is examined in five ways: (1) helping
small business owners promote their business, (2) improving small business owner’s business
skills, (3) government affairs, (4) community development, and (5) economic development.

Promoting One’s small Business

Small business owners may be pressed for time to aggressively promote their business.
The Jefferson Chamber provides opportunities for promotion through several chamber channels
(Lacho and Brockmann, 2011). The Annual Membership Directory list every member by name
and business category in print and online. Chamber members automatically have an Internet
directory listing consisting of company description, and map log on ShopJeffersonNow.com and
an opportunity to post coupons at no charge. The Chamber provides a link to the company’s
homepage from the Chamber’s website.

A new tool for mobile telephones was initiated in 2011 to help users find member
businesses, special deals, and events using GPS integrated technology. Member SDPACE
installed in 2004 is a way for the Chamber members to get their promotions out to each other
primarily via email. Each month submissions are featured on the Chamber’s webpage.

Person-to-person networking is a valuable promotion tool. Networking can occur in
committee work. There are nine committees as noted above. Committee work offers
opportunities to network with other chamber members, both committee members and non-
committee members. Committee work brings name recognition and pathways to higher chamber-
elected positions and even more name recognition and business contacts.
Special events include the Annual Crawfish Boil (600 attendees, some are clients of members), a Day at the Legislature (limited to 50 chamber members), the annual Golf Tournament (400 attendees, some are clients of members), and the annual Jubilation Gala held at night (600 attendees). Attendance varies with nature of the event. Most attendees are chamber members. Non-members would be guests, e.g., friends, spouses, and clients.

The above events offer opportunities to network. However, there are several venues designed primarily for business-to-business networking. These include the bimonthly Business & Breakfast event with an average attendance of 50 people and the evening Business Card Exchange (70-100 attendees). Most attendees at these events are chamber members.

The Chamber offers over 100 events each year. Luncheons are held monthly. Each has a featured speaker. Some luncheons are extra special events such as the Small Business Administration Awards Luncheon or the State of the Parish speech by the Parish President. The average attendance at luncheons is 100-150, most of the attendees being chamber members. One slight exception to this is where a member company buys an entire table and invites clients who may not be chamber members.

A grand opening is available for all new members. Promotional displays are set up on tables at chamber luncheons or networking events. The cost is $100 per event. The Chamber’s logo may be put on business cards, letterhead and advertisements of the business. All members receive a plaque for location display purposes.

**Improving Business Skills**

The small business owner of today is faced with difficult economic times, increased government regulation at all levels and fast changing technology. To keep up with a changing environment the small business owner must update or sharpen his or her business skills. There
are many opportunities to do so at local universities and colleges, community colleges, Small Business Development Centers, Service Corps of Retired Executives (SCORE) chapters, trade associations, (local, state and national), proprietary, and internet programs.

The activities sponsored/arranged by the Chamber were assigned a typology (Lacho and Brockmann, 2012). Chamber events where there was a clear intent to transfer knowledge or information were categorized as Traditional Educational type (lecture-audience). One of the earliest at the Chamber was the establishment of a Toastmasters Club in 2000 to help members improve their public speaking and presentation skills. More recently the Chamber presented workshops on email marketing, hurricane protection, the Affordable Healthcare Act, and using the Chamber’s web tools. A more stable feature is the “Stayin Alive” program. On the average eight sessions are held annually. During 2012 the sessions centered around the theme of improving sales.

Events which were less formal than a classroom setting but still possessing an intent to transfer knowledge were classified as Passive Educational. These events included breakfasts and luncheons where a speaker delivered an address. Regular luncheon addresses include presentations by political or government officials such as the governor of Louisiana and the president of Jefferson Parish (State of the Parish Address). Other political or government officials have included speaker of the state house of representatives, state treasurer, and area congressional representatives. Such passive events include talks by academic economists on the state of the state and/or local economy.

The Casual Educational opportunities consist mostly of networking events. Such events were not intended as knowledge transferring, however, any meeting between business owners
presents a vehicle for learning. For instance, during casual conversations members may meet someone who may give advice on a particular business problem (Lacho and Brockman, 2012).

**Government Affairs**

One of the goals of a chamber of commerce is to advocate a pro-business legal and regulatory environment (Wahl II, 2010). The Jefferson Chamber’s Governmental Affairs committee is charged with this goal. Two major means to achieve this goal are used. The Chamber provides the members the opportunity to hear, meet, and question local, state, and federal elected officials at luncheons, and a Day at the Legislature. The annual Washington Fly-in allows members to meet with the area’s congressional delegation.

Secondly, the Chamber supports issues which it considers important to residents and businesses of Jefferson Parish. For example, the Chamber said no to $329 million in business taxes proposed in the Spring 2013 state legislature. It was felt that the tax increase would have a negative effect on economic development in Jefferson Parish let alone the state.

In the wake of political criticism of parish elected officials, the Chamber and its volunteers partnered with the Parish to help the community understand the importance of having an inspector general (IG) in the parish. In 2010 the Chamber supported the LA GRAD Act legislation. The measure allows the state’s post secondary education management boards to enter into performance agreements with the Louisiana Board of Regents granting them the authority to raise tuition and fees in exchange for meeting certain objectives. In 2012 the Chamber Board voted in support of the parish school board millage tax rededication. In 2009 the Chamber initiated a web-based grassroots system called Voter Voice. The system encourages members to contact elected officials while the state legislature is in session.
Community Development

Residents and business owners of any community have an interest in the quality of life where they live, e.g., a good place to raise a family. Factors such as good streets, sanitation pick up, street lighting, flood protection, recreation facilities, good elementary and secondary schools, available healthcare, jobs and crime-free streets are all quality of life factors.

The Jefferson Chamber over the years has supported many projects and events which have contributed to a better way of life in the parish. A selected list of nine projects and events is listed below: (Our Story, 2012-2013)

1. 1998 – The Chamber created the beautification committee, ImageWorks. The committee pulled together property owners, civic associations, neighborhood groups, and the State Department of Transportation and Development and helped beautify streets and neutral grounds.

2. 2001 – The Chamber supported a millage election to provide matching funds for a flood control project.

3. 2003 – To promote the quality of Jefferson Parish Public schools Cox Cable Louisiana and the Chamber presents the Excellence in Education luncheon each year. The luncheon recognizes top principals, teachers, and students in Jefferson Parish.

4. 2003 – The Chamber was a proponent in obtaining funding for a performing arts complex and also assisted in opening the PGA Tournament Players golf course.

5. 2006 – The Chamber Education Committee assists each year in programs aimed at better schools and higher educational standards in the parish.
6. 2007 – The Tour de Jefferson is the largest community event organized by the Chamber. In 2008 the Chamber helped implement the bike route map developed by the parish and the Regional Planning Commission.

7. 2008 – The Chamber worked with the Harvey Canal Industrial Association (HCIA), Jefferson Parish Economic Development Commission (JEDCO), and the Jefferson Business Council to fund a Hurricane Protection Study to help the HICA lobby for greater hurricane protection along the Harvey Canal.


9. 2011 – The young professional group of the Chamber (Jefferson Coalition of Emerging Leaders) was formed. Their first community effort was a six-week family concert series at a local park.

The foregoing are examples of the activities of the Chamber which contribute to the development of Jefferson Parish as a good place to live. Next, we consider economic development.

**Economic Development**

The Jefferson Chamber does not get directly involved in economic development activities in the parish. Economic development is the responsibility of the Jefferson Parish Economic Development Commission (JEDCO), an independent, yet complementary arm of the parish government. JEDCO provides help to businesses (or prospective businesses) with financial assistance, site selection, marketing, and a new business incubator.

The Chamber has supported a number of activities which contribute to economic development. A select list is shown below: (Our Story: 2012-2013)
1. 1999 – The Chamber formed a Tourism and Cultural Events Task Force to promote tourism in Jefferson Parish. In its first year, the task force partnered with the parish to sponsor a familiarization trip bringing in representatives of 10-12 sports associations to view local sports venues for sporting events.

2. 2000 – Among the Chamber’s significant accomplishments in 2000 was the creation of the Jefferson Convention and Visitors Bureau, an independent nonprofit organization, not a department of parish government.

3. 2001 – The Chamber was part of an effort to keep the National Football League (NFL) (Saints) in New Orleans. The Chamber was a member of the Louisiana NFL Stadium Committee.

4. 2001 – The Chamber created a technology committee to identify and support programs and projects that spotlight technology initiatives in the parish.

5. 2002 – Key initiatives supported by the Chamber included the one-half sales tax to support public education, bring a professional basketball team to New Orleans, an incentive package for Northrop Grumman Ship Systems and the repeal of the statewide software tax.

6. 2005 – In August 2005 Hurricane Katrina hit the New Orleans Metropolitan Area including Jefferson Parish. In the weeks following Katrina, the Chamber teamed with JEDCO and the Jefferson Business Council to open two Business Recovery Centers on the east and west banks of Jefferson Parish. The Chamber also assisted in establishing the Jefferson Back to Business Call Center which provided critical assistance from the gas utility Atmos Energy.

8. 2007 – Each year the U.S. Small Business Administration recognizes the impact of small business owners throughout the United States. In 2007 the chamber initiated the sponsorship of an annual luncheon honoring local small businesses which have won the SBA’s Small Business Awards.

9. 2011 – Through the Goldmann Sachs 10000 Small Businesses Initiative and the Chamber’s partnership with Delgado Community college, the Chamber mentored more than 50 growing businesses in the New Orleans Metro area.

10. 2012 – Professionals from 24 of the region’s most influential tech-based businesses and organizations educated local businesses and employees at the first Tech-Knowledge e-Business Workshop hosted by the Chamber, Louisiana Technology Council and Delgado Community College.

Discussion

The Jefferson Chamber of Commerce provides a number of ways to help small business owners promote their businesses. Person-to person networking is a major means of promotion. There are many external ways a small business owner can use to improve his or her business skills. The Chamber provides formal and informal ways to help small business owners in improving business skills. One advantage of taking a chamber sponsored program or workshop is that the materials of instruction can be tailor-made to members’ needs.
The Government Affairs Committee is an excellent vehicle to have chamber members apprised of local, state and federal government actions. Perhaps in the future this committee will be the most important of all the chamber’s committees especially as government actions and regulations at all levels impact small business.

**Community Development**

Residents and business owners of any community have an interest in the quality of life, where they live, a good place to raise a family. Factors such as good streets, sanitation pick up, street lighting, flood protection, recreation facilities, available healthcare, good K-12 schools, and crime-free streets are all quality of life factors.

The activities chambers carry out related to community development vary with location (urban vs. rural) and issues at hand. Flood protection may be an issue in the Mandeville area, whereas in Cisco, Texas it would not. The Jefferson Chamber has organized the Tour de Jefferson, a bike ride for the public in Jefferson Parish. This is an example of a community development activity.

**Economic Development**

Economic development may be defined as the attracting, retaining, and helping businesses in the local area. Whether or not a chamber gets into economic development depends upon the location. In Jefferson Parish, the Jefferson Parish Economic Development Commission (JEDCO) does economic development work for the parish. The Jefferson Chamber does not. Even so, the Chamber does play a supportive role for economic development. For example, in 2000 the Chamber played a role in the creation of the Jefferson Convention and Visitor’s Bureau, an independent nonprofit organization and not a department of parish government. The Chamber also helps JEDCO by lobbying with JEDCO on economic development issues.
The role of chambers in economic development varies with the location. In Baton Rouge, Louisiana the chamber is essentially an economic development agency. A chamber may lead in industrial recruitment. Jacksonville, Florida, Nashville, Tennessee, and Austin, Texas are examples of this type of chamber action. (Holladay, 2008). Small businesses make up the great majority of chamber memberships. Promotion help and skill training is a natural area of economic development

**Conclusion**

In earlier times, location near natural resources, waterways, or the ocean dictated economic growth and sustainability. Today, the Internet has changed all the rules (Holladay, 2008). In the era of mobile workers, the quality of life in a community has become important, especially if an area wishes to attract and keep workers and their families.

If they are to survive, chambers of commerce must focus on real issues and problems a community faces (Holladay, 2008). In the case of Jefferson Parish, flood protection and K-12 education are very important. Both community development and government affairs activities have addressed these problem areas in the past.

We can say that the role of the chamber is to achieve certain objectives which the Jefferson Chamber has done. It has built a community to which residents, visitors, and investors are attracted to and want to stay. It advocates a pro-business legal and regulatory environment. It promotes the community’s strengths through marketing and economic development activities and it represents the unified voice of community employers on key business issues.

In summary, chambers must help small business members promote their businesses and improve operations, have a voice in government affairs, and support community and economic development.
References


Nepotism and Non-Family Perceptions of Fairness: An Exploratory Study of Best Practices in Family Firms

Christopher L. Martin, Centenary College of Louisiana

Abstract

Typically, when the offspring of a company’s founder becomes an employee of the firm, the company is classified as a “family firm” or “family owned business”. While recent literature has noted the dominance of family firms and the numerous strategic advantages of family firms, they are frequently criticized for the act of nepotism that defines them. The practice of nepotism has been well documented as a source for perceptions of unfairness among nonfamily employees. Further, these perceptions of unfairness have been tied to numerous negative organizational consequences. This study examined twenty-five family owned firms to determine practices that minimized perceptions of unfair treatment among nonfamily employees relating to nepotism. A conceptual framework is presented that outlines human resource and governance practices that influence fairness perceptions among non-family employees of family owned firms.

Key words: nepotism, family-owned business, fairness, human resources, governance
“The Love of My Life” or “The Life I Love” – Investigating Impacts of New Venture Creation on Marriage

Liang, Chyi-lyi (Kathleen), University of Vermont
Dunn, Paul, University of Louisiana at Monroe (Retired)

Abstract

New venture creation is an important dynamic of the American economy. However, new venture creation has both positive and negative consequences for entrepreneurs and their marriages. The purpose of this study was to explore, by gender, the impact of new venture creation on entrepreneur’s happiness and financial well being and to assess the impact of new venture creation on their marriages. The results show that the majority of entrepreneurs, male and female, were happier and financially better off and that their marriages were either not affected or improved as a result of starting their new venture. Some however had negative experiences from the point of view of happiness, finances, and in their marriages. Most single entrepreneurs had positive experiences related to happiness and finances. Suggestions for further research are discussed.

Recently, there has been a growing interest in discussing the relationships between entrepreneurs and their spouses/partners. Many comments from Entrepreneur.com and the Berkeley Parents Network website describe challenges, risks, and some rewards for entrepreneurial couples. In a bleak economy, many people decide to embark on their own business ventures due to low satisfaction in current jobs, uncertain prospects of employers, or limited options in job search. Being a spouse or a partner for an entrepreneur is not an easy lifestyle. Many entrepreneurial couples share positive aspects of falling in love and working together in their own businesses: “It can be great fun to be married to someone who loves his or her work and is taking creative risks. Sharing ideas, hopes, and dreams for a new business can make for
great conversations and future plans.” (Shellenbarger, 2009). Unfortunately entrepreneurs can also be the worst spouses, “… even in prosperous times, because they want to invest almost all their time and energy in the business.” (Entrepreneur.com) Researchers have studied family relationships, couple’s coping and support, divorce and remarriage, and counseling in various fields such as sociology, economics, business, and psychology. However the relationships of entrepreneurial couples and impacts of new venture creation on marriage have not been thoroughly studied. Several questions remain to be explored in entrepreneurship literature including – does new venture formation lead to constructive or destructive impacts on marriage? And, is it possible to differentiate levels of the impacts of new venture formation on marriage? Scholars and practitioners have speculated a variety of theories about entrepreneurs starting their own business and the potential impacts on their spouses/partners. For example, more people would attempt or consider to start their own businesses when the economy takes a down turn; spouses/partners at first would be likely to support the idea either for the love of each other or for the lifestyle they want to establish; passion and commitment for the new business sometimes surpass personal feeling as the couples move forward and deeper in planning and managing the new venture; and finally entrepreneurial couples might choose to split and to further pursue individual goals on different paths. Many of these speculations are shared by individuals through anecdote statements. Based on Google Trends Search for the most popular interests worldwide, there were no significant correlations between economic crisis and business startup since 2004 (Figure 1 and Figure 2). There was certainly not much interest in entrepreneurial marriage until 2013 (Figure 3). It is clear that we recognize the importance of new venture creation and couples’ satisfaction of their choices for work. However, very little science-based evidence exists to investigate impacts of new venture creation on marriage, and the levels of positive or negative impacts that starting a business could have on couples’ feelings to each other.
This paper presents results of a survey-based study to explore entrepreneurs’ assessment on new venture creation – their personal happiness, financial satisfaction, and different levels of impacts on their marriages by gender of the entrepreneurs. Although the sample of the survey reported in this article was limited to a specific region in the United States, the survey instrument has been developed and applied in previous studies (Dunn & Liang, 2001; Liang, 2002; Liang & Dunn, 2012; Liang & Dunn, 2011; Liang & Dunn, 2010; Liang & Dunn, 2009; Liang & Dunn, 2008; Liang & Dunn, 2007). There are a number of reasons why it is important to investigate entrepreneurial perceptions on marriage. First, the analysis from previous studies indicated the challenges to balance family life and business life (Liang, 2002). Many spouses/partners are involved in the new venture creation planning, decision making, and management process. There seems to be cost-saving incentives for spouses/partners to work in business together such as tax deduction, savings on employees’ compensation and insurance and presumably flexible working hours. While many theorize how business startup might influence family relationships and marriage, there has been little empirical evidence to support such theories. A second reason for exploring the impact of new venture creation on marriage is the need to better inform entrepreneurs and their loved ones, and to provide more strategic assistance for nascent entrepreneurs and their spouses/partners. Loving the dream of owning a business is one thing, and sharing this dream with the loved ones is another. More business owners mentioned that their business was their life and their life was their business, up from 34 percent in 2011 to 45 percent in 2012 (SBA, 2013). While more entrepreneurs take their business more seriously, their spouses/partners need to be more prepared if the business decisions link to their family/personal career planning and development.

A third reason for examining the impact of new venture creation on marriage is to support healthy and sustainable business practices by helping entrepreneurs and their
spouses/partners to create a balanced trajectory in the future. Many new businesses fail in the first few years after starting up, due to lack of experience, lack of resources, lack of market, and macro-economic factors (SBA, 2013; Honjo, 2000; Deakin, 1972; Everett & Watson, 1998). Emotional stress, lack of quality time, and incompatible expectations and reality often create more problems for entrepreneurs and their spouses/partners (Liang, 2002). A prosperous economy relies on strong business development, and strong business development relies on positive entrepreneurial spirit. The evidence suggests an increasing number of entrepreneurs and their spouses/partners choose to share their life and business (SBA, 2013). Thus it would be essential to understand how the new venture influences entrepreneurs’ assessment on their personal happiness and financial goals with respect to any changes in their marital situations.

Source: Google Trends

Figure 1. Index of Web Search Interest Using the Keyword “Economic Crisis” Worldwide
Source: Google Trends

Figure 2. Index of Web Search Interest Using the Keyword “Business Start Up” Worldwide

Source: Google Trends

Figure 3. Index of Web Search Interest Using the Keyword “Entrepreneur Marriage” Worldwide
Literature Review

General Aspects of Entrepreneurial Individuals and Families

Popular concepts discussed in entrepreneurship literature often involve entrepreneurial characteristics and motivations (Bygrave, 1994; Jennings, 1994; Hodgetts & Kuratko, 1995; Vesper, 1996; Lambing & Kuehl, 1997; Timmons, 1999). Commonly cited entrepreneurial characteristics include high achievement driven, action oriented, internal locus of control, tolerance for ambiguity, moderate risk taking, persistent commitment, optimism, independence, and tenacity. The motivations for starting businesses range from achieving personal goals, to seeking personal satisfaction, to improving personal and/or family financial situations. Gartner (1989) argued that “entrepreneurs create organizations, while non-entrepreneurs do not.” Studying entrepreneurial traits and characteristics seemed to limit our capacity in conducting research in entrepreneurship, since there is really no generic definition of the entrepreneur (Brockhuas & Horwitz, 1985). It seems reasonable to identify research of entrepreneurship to be a behavioral approach – to understand how entrepreneurs make decisions given a set of parameters and resources. Entrepreneurship represents a dynamic process of creating organizations, and such decisions could influence the development of business ventures, personal life, and family affairs.

More recent literature has discussed entrepreneurial psychology, expectations, decision making, and interactions with family members (Dunn & Liang, 2001; Liang, 2002; Liang & Dunn, 2012; Liang & Dunn, 2011; Liang & Dunn, 2010; Liang & Dunn, 2009; Liang & Dunn, 2008; Liang & Dunn, 2007). Entrepreneurs are generally optimistic about their venture concepts, while some are more optimistic than others. Previous research have shown realistic entrepreneurs were more likely to be conservative in projecting their success in new venture creation, and more likely to achieve their goals in personal/family satisfaction and financial rewards (Liang & Dunn,
ASBE 39th Annual Conference

2010). Bygrave (1994) reported that family responsibilities played a key role in new venture formation decisions. Family members often need to sacrifice their time and financial reserves to support the new venture. When the dream business idea and family interests clashes, entrepreneurs have to face consequences to choose which comes first (Longenecker, Moore, & Petty, 2000). “Cofounding a company with a spouse is really hard”, said a married couple interviewed by the Business Insider (2013), “The rate of failure for startup is so high that you kind of attach your marriage to a business that has unpredictable outcomes.” The uncertain future of the new venture relates to loss of income and investment, long working hours, high stress, and conflict of interests which would potentially infuse negative feelings, arguments, separation, or divorce. Many people shared personal experiences in starting a company with their spouses/partners and balancing family life – establish separated roles in business and family, set up rules and reasonable goals, are okay to comprise sometimes, be frank, and share feelings openly (e.g. Inc, 2013; Entrepreneur.com, 2011). Some argued that it might be beneficial for couples to integrate family life and work, ensure spouses’ involvement in making business decisions, and treat spouses/partners as number one client (CNBC, 2012). Mixed strategies have been proposed to support entrepreneurial couples in new venture creation, and little research has been conducted in analyzing various levels of impacts of new venture creation on marriage.

One of the primary goals for entrepreneurs to start new businesses is to seek financial rewards. Let us look at the issues from a different angle – how would marriage and divorce impact on wealth? Zagorsky (2013) investigated the relationships between marital status and wealth using longitudinal data in the United States. Results suggested that for respondents who married and stayed married in the baby boomer generation, per person net worth was 93 percent higher than for single respondents. Moreover, these married respondents’ wealth increased on average by 16 percent per year, comparing to divorced or single respondents. Family
embeddedness, couples’ education and experiences, and family dynamics directly relate to new venture opportunities, new venture creation decisions, and resource mobilization process (Aldrich & Cliff, 2003; Wong, 1986). Unfortunately these intertwined parameters and situations have not been fully examined in previous studies.

Differentiated perspectives in gender, marriage, and new venture decisions have become more important topics in entrepreneurship literature recently (Parker, 2005; Bruni, Gherardi, & Poggio, 2004; Hundley, 2000). Studies varied from gender earnings gap among the self-employed, differences in workload and responsibilities, shifting roles in marriage and child care, and gender influences on business decisions with respect to entrepreneurship. Scholars have also explored challenges and risks associated with gender issues in startup businesses. Comments of women entrepreneurs from previous literature often related to more family constraints, limited capital and resources, and limited experiences in business management (Hundley, 2000; Shelton, 2006; Heilbrunn, 2004). As long as women are defined by the society to serve as the primary caregiver for the family, women entrepreneurs would always struggle to fulfill multiple obligations in new venture creation process (Kim & Ling, 2001).

Given the rising number of family businesses, it will be critical to broaden our research in entrepreneurship to explore impacts of new venture creation on family life and marriage. To date, most of the research in entrepreneurship with respect to gender and marriage issues has been theoretical. Little progress has been made to present empirical analysis that is grounded on science-based systematic approaches. This paper attempts to explain some interactions between gender, marriage, and effects of new venture creation using a robust survey instrument. Our goal is to provide primary data that will (1) support or challenge previous theoretical framework; and
(2) fill the gaps of knowledge associated with gender, marriage, and new venture creation issues in entrepreneurship literature.

Survey Design and Survey Procedures

(1) Questionnaire Design

The survey instrument used in this study has been widely applied in previous research (Dunn & Liang, 2001; Liang, 2002; Liang & Dunn, 2012; Liang & Dunn, 2011; Liang & Dunn, 2010; Liang & Dunn, 2009; Liang & Dunn, 2008; Liang & Dunn, 2007). The survey target is entrepreneur who is already in business. Only business owners were asked to participate in the survey, and none of the spouses or partners was interviewed to avoid conflict of interests. The answers solely reflected entrepreneurs’ assessments. There were five sections in the survey for entrepreneurs to respond to: (1) business profile such as location, years of establishment, number of employees, and source of funding, (2) individual demographics such as age, gender, education, previous business experience, and marital status, (3) entrepreneurial characteristics such as being own boss, being in control, willingness to take risk, optimism, and being independent, (4) expectations and assessment from the venture creation process including general business operation, profit, sales, personal/family happiness, personal/family financial satisfaction, and effects on marriage. This questionnaire has been designed to conduct multiple studies for various purposes. To serve the specific purpose of this study, we focus on reporting gender, entrepreneurs’ assessment on personal happiness and financial satisfaction, and effects of new venture creation on marriage. The questions to reveal entrepreneurs’ assessment on personal happiness and financial satisfaction include:

- *As a result of the business, I am happier.*
- *As a result of the business, I am financially better off.*
Given what I know now, I will start another new venture in the future.

As the result of starting own business, entrepreneurs responded to the following set of questions about effects on marriage:

- Had some problems in my marriage.
- Became estranged from my spouse.
- Been separated from my spouse.
- Been divorced from my spouse.
- Had no effect on my marriage.
- Improved my marriage.

The answers were on a Likert scale as Strongly Agree (1), Agree (2), Disagree (3), and Strongly Disagree (4). We avoided the “Neither Agree Nor Disagree” level and hoped to impose more specific choices from entrepreneurs.

(2) Administration of the Survey

After following a routine procedure of survey design and pre-testing, the questionnaire was delivered to in-business entrepreneurs only. Research assistants (trained undergraduate students) contacted each entrepreneur to conduct the survey. After permission was granted, the entrepreneur was given the questionnaire in person and allowed to complete it in private. After completion, the questionnaire was returned to the research contact person. The collection was during business hours; however it was sometimes necessary to administer the questionnaire while the business was closed or at a convenient time that met the business owners’ schedules. The questionnaire was administered to a convenience sample of business owners in the Mississippi River Delta region between the fall of 2007 and the spring of 2010. There was no direct personal relationship (family members) between the interviewers and the respondents.
However, it is possible that the interviewers were acquainted with the respondents through other connections. Totally 564 surveys were collected and used in this study.

**Data Analysis**

The first step of data analysis is to provide an overview of the sample (Table 1). The data was gathered through surveying business owners, and many spouses did not work in the business directly. Our research focuses on effects of new venture creation on marriage, based on entrepreneurs’ direct assessment. Our intention is not to only study couples working together in business or family businesses.

Over 2/3 of the respondents were male, whether they were single or married. Almost 70 percent of single entrepreneurs and 84 percent of married entrepreneurs were White in our sample. Approximately 56 percent married respondents and 60 percent of single respondents located their businesses in urban area. Fifty-two percent of married entrepreneurs were between the age of 30 and 50, while almost 40 percent of the single entrepreneurs were between the age of 30 and 50. There were more single entrepreneurs under the age of 30 in our sample comparing to married entrepreneurs under 30 years old. The age situation seemed to agree with some arguments in previous literature that it would be harder for married couples to start businesses when they become more established in life.

A majority of respondents had some college education or college degrees, whether they were single or married. Retail businesses and service businesses seemed to dominate in our sample. Interestingly higher percentage of single respondents (68.1 percent) had previous line experiences prior to starting their own businesses, comparing to married respondents (62.3 percent). Not surprisingly, almost 1/3 of the respondents did not have any line experiences before starting their own businesses.
Table 1. Demographics of Survey Respondents

<table>
<thead>
<tr>
<th>Marital Situation</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>Married</td>
</tr>
</tbody>
</table>

**Gender**

<table>
<thead>
<tr>
<th>Count</th>
<th>Count</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Total</td>
</tr>
<tr>
<td>Female</td>
<td>57</td>
<td>134</td>
<td>35.4%</td>
<td>33.8%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Male</td>
<td>104</td>
<td>263</td>
<td>64.6%</td>
<td>66.2%</td>
<td>65.8%</td>
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</tbody>
</table>

**Race**

<table>
<thead>
<tr>
<th>Count</th>
<th>Count</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Total</td>
</tr>
<tr>
<td>White</td>
<td>113</td>
<td>336</td>
<td>69.8%</td>
<td>84.2%</td>
<td>80.0%</td>
</tr>
<tr>
<td>African American</td>
<td>42</td>
<td>47</td>
<td>25.9%</td>
<td>11.8%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>6</td>
<td>7</td>
<td>3.7%</td>
<td>1.8%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>6</td>
<td>0.0%</td>
<td>1.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td>American Indian</td>
<td>0</td>
<td>3</td>
<td>0.0%</td>
<td>0.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
<td>0.6%</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

**Rural or Urban**

<table>
<thead>
<tr>
<th>Count</th>
<th>Count</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Total</td>
</tr>
<tr>
<td>Rural</td>
<td>63</td>
<td>169</td>
<td>40.1%</td>
<td>43.7%</td>
<td>42.6%</td>
</tr>
<tr>
<td>Urban</td>
<td>94</td>
<td>218</td>
<td>59.9%</td>
<td>56.3%</td>
<td>57.4%</td>
</tr>
</tbody>
</table>

**Entrepreneurs’ Age**

<table>
<thead>
<tr>
<th>Count</th>
<th>Count</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Total</td>
</tr>
<tr>
<td>under 30 years old</td>
<td>54</td>
<td>28</td>
<td>34.4%</td>
<td>7.1%</td>
<td>14.9%</td>
</tr>
<tr>
<td>30-50 years old</td>
<td>62</td>
<td>207</td>
<td>39.5%</td>
<td>52.8%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Over 50</td>
<td>41</td>
<td>157</td>
<td>26.1%</td>
<td>40.1%</td>
<td>36.1%</td>
</tr>
</tbody>
</table>

**Education Level**

<table>
<thead>
<tr>
<th>Count</th>
<th>Count</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Total</td>
</tr>
<tr>
<td>Less than high school</td>
<td>6</td>
<td>10</td>
<td>4.1%</td>
<td>2.7%</td>
<td>3.1%</td>
</tr>
<tr>
<td>High School</td>
<td>36</td>
<td>102</td>
<td>24.8%</td>
<td>27.6%</td>
<td>26.8%</td>
</tr>
<tr>
<td>Some College</td>
<td>49</td>
<td>113</td>
<td>33.8%</td>
<td>30.5%</td>
<td>31.5%</td>
</tr>
<tr>
<td>College Degree</td>
<td>43</td>
<td>118</td>
<td>29.7%</td>
<td>31.9%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>11</td>
<td>27</td>
<td>7.6%</td>
<td>7.3%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

**Type of Business**

<table>
<thead>
<tr>
<th>Count</th>
<th>Count</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
<th>% within Marital situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Total</td>
</tr>
<tr>
<td>Retail</td>
<td>46</td>
<td>127</td>
<td>28.8%</td>
<td>31.8%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Service</td>
<td>92</td>
<td>216</td>
<td>57.5%</td>
<td>54.1%</td>
<td>55.1%</td>
</tr>
<tr>
<td>Distribution</td>
<td>3</td>
<td>7</td>
<td>1.9%</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Contractor</td>
<td>1</td>
<td>4</td>
<td>0.6%</td>
<td>1.0%</td>
<td>.9%</td>
</tr>
</tbody>
</table>
Entrepreneurship literature often describes traits or characteristics of entrepreneurs. What exactly do entrepreneurs think about their characteristics? Do entrepreneurs really think they are entrepreneurial, no matter how researchers argue about the appropriateness of studying entrepreneurial characteristics? We asked our sample entrepreneurs to identify their level of agreement corresponding to a set of commonly identified entrepreneurial characteristics (Table 2). Overwhelmingly over 90 percent of our respondents, single or married, identified to ‘want to be independent’ and ‘want to be in control’ by starting their own businesses; and there was no statistical significance between single or married respondents.

Over 90 percent of the respondents also believed that they were innovative and creative. There seemed to be some statistical significance when comparing single respondents to married respondents. A higher percentage of single respondents believed that they were innovative and creative comparing to married respondents (in both strongly agree and agree categories).

When asking about willingness to take risk of owning their businesses, there was a statistical significant difference between single respondents and married respondents. Almost 98 percent of married respondents revealed their willingness to take risks, while 94 percent of single respondents revealed their willingness to take risks (in both strongly agree and agree categories). It is interesting to learn that more married entrepreneurs in our sample are actually more willing
to take personal and business risks to create new ventures. Could it be a sign of constructive support from family members?

Table 2. Summary of Survey Respondents’ Entrepreneurial Characteristics

<table>
<thead>
<tr>
<th>Marital Situation</th>
<th>Single</th>
<th>Married</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to be independent by owning my business</td>
<td>strongly agree</td>
<td>Count</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>66.0%</td>
<td>69.0%</td>
</tr>
<tr>
<td></td>
<td>agree</td>
<td>Count</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>30.9%</td>
<td>26.3%</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>Count</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>2.5%</td>
<td>3.8%</td>
</tr>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total Count</td>
<td>162</td>
<td>400</td>
<td>562</td>
</tr>
<tr>
<td>I want to be in control by owning my business</td>
<td>strongly agree</td>
<td>Count</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>69.6%</td>
<td>66.1%</td>
</tr>
<tr>
<td></td>
<td>agree</td>
<td>Count</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>24.8%</td>
<td>29.9%</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>Count</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>5.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>.6%</td>
<td>.5%</td>
</tr>
<tr>
<td>Total Count</td>
<td>161</td>
<td>398</td>
<td>559</td>
</tr>
<tr>
<td>I am an innovative and creative person</td>
<td>strongly agree</td>
<td>Count</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>53.1%</td>
<td>42.9%</td>
</tr>
<tr>
<td></td>
<td>agree</td>
<td>Count</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>41.3%</td>
<td>47.4%</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>Count</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>4.4%</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Count</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>1.3%</td>
<td>.3%</td>
</tr>
<tr>
<td>Total Count</td>
<td>160</td>
<td>399</td>
<td>559</td>
</tr>
<tr>
<td>I was willing to take the risks (personal and business) of owning my business</td>
<td>strongly agree</td>
<td>Count</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>65.8%</td>
<td>67.7%</td>
</tr>
<tr>
<td></td>
<td>agree</td>
<td>Count</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>28.6%</td>
<td>30.8%</td>
</tr>
<tr>
<td></td>
<td>disagree</td>
<td>Count</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>5.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>% within Marital situation</td>
<td>0.0%</td>
<td>.5%</td>
</tr>
<tr>
<td>Total Count</td>
<td>161</td>
<td>399</td>
<td>560</td>
</tr>
</tbody>
</table>

Entrepreneurship and sociology literature attempted to formulate linkages between new venture creation and the pursuit of happiness. However there has been no data to demonstrate if personal happiness relates to gender differences when assessing effects of new venture creation.
on marriage. Our study uncovered new findings about gender, happiness, and marital issues that have not been discussed before (Table 3). Thirty-two percent of married female respondents strongly agreed and 21.8 percent agreed that they were happier after starting their own businesses, and their marriage was improved after starting own businesses. Fifty-four percent of married female respondents strongly agreed and 63.6 agreed that they were happier after starting their own businesses, and new venture creation had no effect on their marriage. Almost 14 percent of married female respondents (strongly agreed and agreed) believed that starting the businesses had some negative impacts of their marriage, even though they were happier after starting their own ventures.

What do male entrepreneurs think about their businesses and their marriage situation? Thirty-three percent married male respondents strongly agreed and 21.1 percent agreed that they were happier and their marriage was improved as the result of starting own businesses. Approximately 47.7 percent of married male respondents strongly agreed and 52.8 percent of married male agreed that the new venture creation brought personal happiness and had no effect on their marriage. Between 15.6 percent and 20.3 percent married male respondents believed that they had some problems in their marriage as the result of starting businesses (strongly agree and agree about personal happiness).

As our results showed, more female respondents than male had a more assessment on their personal happiness and their marriage. There were a few single respondents revealed the effect of new venture creation on their marriage. This actually makes sense if these individuals were single then re-married. Some respondents were estranged or divorced, or they could be in the process of getting a legal separation or divorce when we were conducting this survey. It really depends on the ‘current’ situation of our sample entrepreneurs when they were answering
these questions. It is still fascinating to discover multiple layers of the assessment on personal happiness and marital status given gender differences based on our results.

Table 3. Respondents’ Assessment of Personal Happiness Corresponding to Gender and Effects on Marriage

<table>
<thead>
<tr>
<th>As a result of the business, I am happier</th>
<th>Effect on Marriage</th>
<th>Marital situation</th>
<th>Single</th>
<th>Married</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly agree Female***</td>
<td>Improved</td>
<td>Count</td>
<td>0</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>0.0%</td>
<td>32.0%</td>
<td>25.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No effect</td>
<td>Count</td>
<td>7</td>
<td>27</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>58.3%</td>
<td>54.0%</td>
<td>54.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
<td>2</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>16.7%</td>
<td>14.0%</td>
<td>14.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>Count</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>25.0%</td>
<td>0.0%</td>
<td>4.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Count</td>
<td></td>
<td>12</td>
<td>50</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Male***</td>
<td>Effect on Marriage</td>
<td>Improved</td>
<td>Count</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>8.3%</td>
<td>33.0%</td>
<td>28.6%</td>
<td></td>
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</tr>
<tr>
<td>No effect</td>
<td>Count</td>
<td>12</td>
<td>52</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>50.0%</td>
<td>47.7%</td>
<td>48.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
<td>2</td>
<td>17</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>8.3%</td>
<td>15.6%</td>
<td>14.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estranged</td>
<td>Count</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>8.3%</td>
<td>0.0%</td>
<td>1.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>Count</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>4.2%</td>
<td>.9%</td>
<td>1.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>Count</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>20.8%</td>
<td>2.8%</td>
<td>6.0%</td>
<td></td>
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</tr>
<tr>
<td>Total Count</td>
<td></td>
<td>24</td>
<td>109</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td>Agree Female***</td>
<td>Effect on Marriage</td>
<td>Improved</td>
<td>Count</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>12.5%</td>
<td>21.8%</td>
<td>20.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No effect</td>
<td>Count</td>
<td>3</td>
<td>35</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>37.5%</td>
<td>63.6%</td>
<td>60.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>12.5%</td>
<td>14.5%</td>
<td>14.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estranged</td>
<td>Count</td>
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<td>0</td>
<td>1</td>
<td></td>
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<tr>
<td>% within Marital situation</td>
<td>12.5%</td>
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<td>1.6%</td>
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<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>Count</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>25.0%</td>
<td>0.0%</td>
<td>3.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Count</td>
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<td>8</td>
<td>55</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Male**</td>
<td>Effect on Marriage</td>
<td>Improved</td>
<td>Count</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>8.0%</td>
<td>21.1%</td>
<td>18.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No effect</td>
<td>Count</td>
<td>11</td>
<td>65</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>44.0%</td>
<td>52.8%</td>
<td>51.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
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<td>25</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>20.0%</td>
<td>20.3%</td>
<td>20.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estranged</td>
<td>Count</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>4.0%</td>
<td>1.6%</td>
<td>2.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Effect on Marriage</td>
<td>Female</td>
<td>Male***</td>
<td>strongly disagree</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>--------</td>
<td>---------</td>
<td>-------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Improved</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
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<td>16.7%</td>
<td>14.3%</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
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<td>Count</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>0.0%</td>
<td>16.7%</td>
<td>14.3%</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>0.0%</td>
<td>50.0%</td>
<td>42.9%</td>
<td>17.6%</td>
<td></td>
</tr>
<tr>
<td>Estranged</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>100.0%</td>
<td>0.0%</td>
<td>14.3%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>Count</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>% within Marital situation</td>
<td>0.0%</td>
<td>16.7%</td>
<td>14.3%</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td>Total Count</td>
<td>5</td>
<td>25</td>
<td>30</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Note: ***significant at 0.001 significance level, **significant at 0.01 significance level, comparison within marital situation given gender category.

Seeking financial satisfaction is another commonly cited reason for people to start their own businesses. Are there any differences between financial reward and marital situation comparing female assessment to male assessment? Twenty-nine percent married female respondents strongly agreed and 20.4 percent agreed that their personal financial situation was improved as a result of starting the business, and they also believed that their marriage was...
improved (Table 4). Over 50 percent of married female respondents agreed on financial improvement, and agreed that the new venture had no effect on their marriage. Between 13 percent and 24 percent of the married female respondents believed that their financial situation was improved due to the new venture creation, however they experienced some problems in their marriage.

Married male respondents had a slightly higher percentage agreeing on both improvement on financial situation and marital situation (Table 4). A slightly lower percentage among married male respondents compared to their female counterparts indicated that the new venture had improved their financial situation and starting the business had no effect on their marriage. Between 15 percent and 23 percent of the married male respondents believed that their financial situation was improved due to the new venture creation, however they experienced some problems in their marriage.

Again, few married entrepreneurs in our sample disagreed with the statement that new venture creation actually improved their financial situation. The single respondents who answered the questions to assess their marital situation could be in one of these scenarios: (1) they were going through separation or divorce process; (2) they were in the process of a new marriage after the previous marriage was dissolved; or (3) they were going through a temporary estranged situation during our survey period and they were trying to figure out something to do with their business and/or marriage.

One question that has never been fully discussed in entrepreneurship literature is entrepreneurs’ decisions on creating more new ventures in the future, given what they have learned in the past. Our survey asked entrepreneurs to assess future prospects of starting another new venture, given their experiences in potential problems between starting businesses and
effects on marriage (Table 5). Not surprisingly, most of the respondents, female and male, who had positive experiences in their marriage believed that they would start another venture in the future. Those respondents who had negative experiences in their marriage probably would not start another new venture, with only few exceptions.

Table 4. Respondents’ Assessment of Personal Financial Satisfaction Corresponding to Gender and Effects on Marriage

<table>
<thead>
<tr>
<th>As a result of the business, I am financially better off</th>
<th>Marital Situation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree Female* Effect on Marriage</td>
<td>Count</td>
<td>Single</td>
</tr>
<tr>
<td>Improved</td>
<td>Count</td>
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</tr>
<tr>
<td>% within marital situation</td>
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<td>29.4%</td>
</tr>
<tr>
<td>No effect</td>
<td>Count</td>
<td>7</td>
</tr>
<tr>
<td>% within marital situation</td>
<td>63.6%</td>
<td>54.9%</td>
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<tr>
<td>Some problems</td>
<td>Count</td>
<td>2</td>
</tr>
<tr>
<td>% within marital situation</td>
<td>18.2%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Divorced</td>
<td>Count</td>
<td>2</td>
</tr>
<tr>
<td>% within marital situation</td>
<td>18.2%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Total Count 11 51 62

Male*** Effect on Marriage

| Improved | Count | 2 | 38 | 40 |
| % within marital situation | 9.1% | 29.7% | 26.7% |
| No effect | Count | 10 | 65 | 75 |
| % within marital situation | 45.5% | 50.8% | 50.0% |
| Some problems | Count | 3 | 20 | 23 |
| % within marital situation | 13.6% | 15.6% | 15.3% |
| Separated | Count | 0 | 1 | 1 |
| % within marital situation | 0.0% | .8% | .7% |
| Divorced | Count | 7 | 4 | 11 |
| % within marital situation | 31.8% | 3.1% | 7.3% |

Total Count 22 128 150

Agree Female*** Effect on Marriage

| Improved | Count | 1 | 11 | 12 |
| % within marital situation | 11.1% | 20.4% | 19.0% |
| No effect | Count | 4 | 29 | 33 |
| % within marital situation | 44.4% | 53.7% | 52.4% |
| Some problems | Count | 0 | 13 | 13 |
| % within marital situation | 0.0% | 24.1% | 20.6% |
| Estranged | Count | 1 | 1 | 2 |
| % within marital situation | 11.1% | 1.9% | 3.2% |
| Divorced | Count | 3 | 0 | 3 |
| % within marital situation | 33.3% | 0.0% | 4.8% |

Total Count 9 54 63

Male** Effect on Marriage

| Improved | Count | 2 | 20 | 22 |
| % within marital situation | 7.4% | 20.6% | 17.7% |
| No effect | Count | 11 | 49 | 60 |
| % within marital situation | 40.7% | 50.5% | 48.4% |
| Some problems | Count | 6 | 23 | 29 |
| % within marital situation | 22.2% | 23.7% | 23.4% |
| Estranged | Count | 3 | 2 | 5 |
### Table: Effect on Marriage

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Note: ***significant at 0.001 significance level, **significant at 0.01 significance level, comparison within marital situation given gender category.
## Table 5. Respondents’ Assessment of Starting another New Venture Corresponding to Gender and Effects on Marriage

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<thead>
<tr>
<th>Marital situation</th>
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<th>Male***</th>
<th>Total</th>
</tr>
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<tbody>
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<td>Strongly agree</td>
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<td></td>
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</tr>
<tr>
<td>I would start up a business again</td>
<td></td>
<td></td>
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</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Improved</td>
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<td>Single</td>
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</tr>
<tr>
<td>No effect</td>
<td>Count</td>
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<td>11</td>
</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
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</tr>
<tr>
<td>Divorced</td>
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<td>Total Count</td>
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<td></td>
</tr>
<tr>
<td>Effect on Marriage</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Improved</td>
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<tr>
<td>No effect</td>
<td>Count</td>
<td>Single</td>
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<tr>
<td>Some problems</td>
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<tr>
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<tr>
<td>Effect on Marriage</td>
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<td>Count</td>
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</tr>
<tr>
<td>Some problems</td>
<td>Count</td>
<td>Single</td>
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</tr>
</tbody>
</table>

*Female***: p < .001, Male***: p < .001
## Conclusions, Discussion, and Implications

Scholars have debated for decades about what entrepreneurship research should focus on. In general, three aspects have emerged in entrepreneurship literature – entrepreneurial individuals, entrepreneurial opportunities, and entrepreneurial environment. Much information in entrepreneurship literature involves theoretical frameworks or conceptual approaches to hypothesize entrepreneurial process in new venture creation. Very little attention has been paid to understanding family dynamics and interactions prior to, during, or after the new venture formation and opportunity exploitation (Aldrich & Cliff, 2003). Our study was designed to explore different levels of effects of new venture creation on marriage, considering potential differences in entrepreneurs’ gender. It is not our intention to generalize the results, since the

<table>
<thead>
<tr>
<th>Male</th>
<th>Effect on Marriage</th>
<th>Improved</th>
<th>Count</th>
<th>% within Marital situation</th>
<th>0.0%</th>
<th>54.5%</th>
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</thead>
<tbody>
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<td></td>
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</table>

| Female | Effect on Marriage | No effect   | 1     | 1                         | 12.5% | 12.5% |
|--------|--------------------|-------------|-------|---------------------------|-------|-------|-------|
|        |                    | Some problems| 5     | 5                         |       |       |       |
|        |                    | Estranged   | 1     | 1                         | 12.5% | 12.5% |
|        |                    | Separated   | 1     | 1                         | 12.5% | 12.5% |
|        | **Total Count**    |             | 8     | 8                         |       |       |       |

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</thead>
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</table>

Note: ***significant at 0.001 significance level, **significant at 0.01 significance level, comparison within marital situation given gender category.
sample was limited to one region in the United States. However, empirical data indeed provided supportive evidences to many discussions in existing literature. The traditional view of a family consists of people who are related by blood or marriage, and the family business is pretty much self-defined by the family composition. In reality, there are different ways to define a family based on socially constructed format which vary greatly across culture, generations, and ideology (Koerner & Fitzpatrick, 2002). In our research, we studied married couples versus single individuals in the process of new venture creation. We did not separate married couples working together in business, so we could avoid implicit biases in entrepreneurs’ responses. To gather mutually exclusive responses from entrepreneurs and spouses, we would have to design and deliver two sets of survey instruments to interview each individual separately. It will be more time consuming and the survey procedure might create family confrontations for entrepreneurs and their spouses/partners.

Most of the survey respondents were happier as a result of starting their own businesses, and they believed the new venture actually improved their financial situation. For both female and male entrepreneurs who were married during the survey time period revealed positive experiences in marital situation during the new venture creation process. This positive experience might relate to a few reasons:

- First, research showed significant and substantial positive interdependence of business ownership propensities within couples, and results were consistent with both female and male entrepreneurs (Parker, 2005). Information and knowledge sharing seemed to contribute to positive knowledge transfer from the other, which significantly enhanced their joint constructive development in both family development and business development.
• Second, flexibility has been an essential factor contributing to the success of operation and management of family businesses (Brannon, Wiklund, & Haynie, 2012). When couples starting businesses together, it is assumed that they have the opportunities to jointly decide on roles and responsibilities in business and family. It is also hypothesized that couples working together would share similar passion, interests, and commitment in career orientations. They would be more likely to view each other as equal business partners with high level of trust and confidence with each other.

• The third reason for our survey respondents to review positive experiences in new venture creation and marriage improvement might relate to maturity in established family ties. Married couples established their marriage prior to starting new businesses, which may strengthen the co-independence in making business decisions. Whether spouses work in the business or not, entrepreneurs need to communicate with their spouses/partners. Joint decisions would be better and more appreciated by spouses/partners, especially in resource allocation and financial investment. In our survey, many married entrepreneurs were older (over 30 years old) and may have more concrete relationships with their spouses. Therefore a majority of respondents in our study were more confident and comfortable about their relationships with their spouses/partners in the new venture creation process.

• Education levels and previous line experiences might influence the establishment of new ventures. In our sample, most of the respondents had at least some college degree and some line experiences prior to starting own businesses. When entrepreneurs are more informed and prepared about business opportunities, they would be more confident to start their own businesses without risking family resources. Thus their spouses/partners would be more confident and supportive in the new venture creation process.
Our study has presented some preliminary information with respect to several new dimensions in entrepreneurship research. Family relationship, marital situations, conflicts and rewards among couples, and perceived gender differences have been overlooked in the past. As new research topics with respect to entrepreneurial couples have been developed recently, more empirical information is needed to guide future studies. Several questions are yet to be answered. For example, how would entrepreneurial couples evaluate their marriage situation when spouses/partners working in the business full time versus part time, or working in other jobs? What are the financial implications for entrepreneurial couples to decide working together or not? Do entrepreneurs view personal happiness the same way as their spouses/partners, or how different are their views about happiness and satisfaction as a result of new venture creation? The contribution of the knowledge generated by studying entrepreneurial couples could potentially invent a result in an integrated framework for research in sociology, entrepreneurship, and economics.
References


Interior Planning: A Small Business Discussion Case

Ed Bashaw, Arkansas Tech University
Sherman Alexander, Arkansas Tech University
Stephen Jones, Arkansas Tech University

Abstract

This case revolves around a strategic decision that the CEO of a small office interior consulting firm must make as a result of supplier, competitor and customer changes in the industry over the last few years. The company has been negatively affected by the economic downturn of recent times, a common problem for firms affiliated with the construction and office space industries. Interior Planning is facing hard choices in an industry which is seeing margins shrink and competition increase in a fight for survival. It must find a way to remain profitable and at the same time preserve its market share.

The Case

The Situation

Interior Planning President and CEO Paul Mondello just sat down at his cluttered desk. His primary task this morning is to review Interior Planning’s price and service quotes based on the RFP (request for proposal) for office furniture and consulting services required for the new office space soon to be completed for data services firm Acme. The RFP and Interior Planning’s draft of their proposal was given to him by Vice President of Sales and Marketing Chris Lorenzo. They had scheduled a meeting later today to discuss how to win the Acme business. “It’s in here someplace,” Paul grumbled to himself as he clumsily pushed aside piles of paper to try to find the RFP and the initial draft. “We really need to get a win this time,” he muttered as he thought about recent losses to competitors.
Interior Planning had just endured one of the roughest stretches since it was formed in 1979. The so-called Great Recession that started in 2007 had greatly curtailed new office construction plans. Companies either jumped into survival mode or took a “wait and see” attitude when it came to office updating or expansion. Because they were so closely tied to office furniture and office space planning, Paul and Chris were happy to have survived.

As Paul rummaged through the top of his desk looking for the RFP, he noticed the Industry Research Report (see Addendum A) that he had done for him by staff members. The U.S. Office Furniture Manufacturing report showed that signs of life were appearing after four consecutive declines in revenue growth. In fact, in 2009 the industry lost over 26% of revenue from 2008, despite 2007 and 2008 being decline years as well. Wholesaling and retailing of office furniture showed a similarly grim picture. “Hopefully, we are out of the worst of it,” Paul thought to himself.

“Where’s that darn RFP,” Paul shouted to no one in particular. As he continued to look for “that darn RFP”, Paul noticed the summary sheet (Appendix B) of a financial analysis he’d had Bill Summers, the Vice-President of Finance, provide. “This is interesting, very interesting.”

Bill had used 2009 as the baseline year, since it represented the low point for Interior Planning – there was much speculation if Interior Planning was going to survive since sales were down over 30% that year. 2010, though sales were down almost 6%, was considered a good year since they stopped the bleeding and survived. 2011 and 2012 showed signs of life as Interior Planning and the industry both showed modest gains (see Figure 1).
Figure 1: Office Furniture Market Industry U.S. Sales 2001 - 2012.

Source: BIFMA (www.bifma.org)

Modest gains were not what Paul thought to be interesting. What caught Paul’s attention was that sales were down each of the last four years, even though sales for hard goods had shown increases. What was “interesting” to Paul was that percent gross margins for services had increased each year – from 47.5% to 55.0% in 2012 – and, at the same time, percent gross margins on hard goods was falling each year (from 26.7% to 24.0% in 2012). Paul thought, “Is the ‘Great Recession’ changing the nature of my business?”

“Dang it! Where’s that RFP?” Paul yelled in frustration. “I’ve got to get this desk cleaned up,” he thought to himself. While still sorting through the mounds of paper on his desk, he noticed a Phone Call Back form for Tim Miller. Tim is Paul’s friend and work out buddy at the gym. Tim is the co-founder of Forthright Marketing, a branding and advertising agency. Paul had called Tim back and now he remembers their conversation – business not recreation. Paul remembers numerous work out conversations with Tim about how Interior Planning could
benefit from a more formal branding and marketing effort. Paul was all for marketing, but he didn’t want to change from the strategy of competitively priced hard goods (primarily office furniture) used to capture the higher priced services that always seemed to accompany the hard goods combined with word of mouth ‘advertising’ and the Interior Planning name. “If it ain’t broke, why fix it,” he told Tim at the time. The ‘margin’ story had Paul wondering if it might start to be broken.

“You gotta be kidding me! Chris, are you still here?” Paul finally found the RFP. Chris was not still here. Paul couldn’t believe what he found in the RFP. Margins on hard goods quoted by Chris were unbelievably low – 18.5% for Acme. “Why?” he wondered. He thumbed through the entire RFP and found a sticky note from Chris. It read, “I know the margins are low on this. But Paul, we’re getting beat by Brand X and Brand Y, not on price. We have to lower our margins to be in the ball park. That helps gets us the consulting and services contract. Let’s talk Monday. Chris.”

Paul looked over the three items in his ‘keep’ pile – Acme RFP, year-end financial summaries, and the Call Back Form with Tim’s phone number. The RFP quote and the financials didn’t make Paul confident. He’d had a nagging suspicion that Interior Planning had been looked at as a commodity. “We offer quality office furniture and along with sound space planning consulting and other services. Why do we have to practically give away the furniture? What are our competitors doing so that it doesn’t seem they are cutting margins? So many questions.” Paul thought he might want a hard work out with Tim to kill some of the day’s stress.
Paul picked up the phone, “Tim, this is Paul. Let’s go work out – hard! Great! See you in 30.” Paul was ready to forget, temporarily, the cares of this day. “But,” he thought, “I think I’ll talk to Tim about this branding thing.”

The Inside Story

Interior Planning is a full service contract office furnishings dealer. This means they offer a full range of services, from on-site consultation, design and organization, budgeting, and installation services. Their primary market focus is central Arkansas, but they defined their service area as the entire state. The Census Bureau (2012) defines their industry, Office and Business Furniture Merchant Wholesalers (4232102) as “merchant wholesale distribution of filing cabinets (wood or steel), office furniture, store furniture, and public furniture for public parks and buildings.”

While sales in Arkansas apparently began to stabilize near the end of the decade, companies were still consolidating their resources. The number of firms in the industry in the state had stopped falling, but the number of employees and company payrolls continued to decline (Table 1).
Table 1. Furniture Merchant Wholesalers in Arkansas

<table>
<thead>
<tr>
<th>Year</th>
<th>Paid Employees</th>
<th>Q1 Payroll</th>
<th>Annual Payroll</th>
<th>Total Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>811</td>
<td>6,927</td>
<td>27,772</td>
<td>40</td>
</tr>
<tr>
<td>2009</td>
<td>462</td>
<td>4,885</td>
<td>18,417</td>
<td>35</td>
</tr>
<tr>
<td>2010</td>
<td>318</td>
<td>3,574</td>
<td>15,080</td>
<td>32</td>
</tr>
<tr>
<td>2011</td>
<td>294</td>
<td>3,500</td>
<td>14,146</td>
<td>32</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, County Business Patterns.

Interior Planning was originally incorporated in 1979 as a privately-held corporation owned by John Northrup, founder and chairman. The venture has met with much success. Continued growth has led to three moves. The current location is a 30,000 square foot space in the River Market District of downtown Little Rock.

Interior Planning’s management structure is relatively flat. Mr. Northrup operates like a silent partner. He is consulted in all major decisions of Interior Planning, but is not involved in the day to day operations. Paul Mondello is the President and CEO. He utilizes three Vice-Presidents: Bill Summers, VP of Finance; Chris Lorenzo, VP of Sales and Marketing; and Cynthia North, VP of Operations and Design. Each is actively involved in leading and managing their area of the enterprise in an integrative manner. Following a typical sales cycle for a new project illustrates the nature of the management team’s integration.
Typically, the cycle begins with Mr. Lorenzo (VP – Sales and Marketing). He “hustles the business” and tries to uncover opportunities for new business. Whether through past contacts and relationships or uncovering new office expansion plans, Chris puts into play sales systems designed to help him discover these opportunities and marketing systems designed to promote and raise Interior Planning’s market profile and create a useful image. Once Interior Planning is asked to make a request for proposal (RFP), they are off and running. An RFP is a solicitation made to potential suppliers by an entity interested in procuring commodities, goods, and/or services from these suppliers. The RFP communicates in detail the needs of the purchasing entity so that the supplier will be able to respond with product and service price quotes, typically in a bidding situation where several suppliers compete for the business. Chris, after determining the needs outlined in the RFP will consult with Ms. North to make initial recommendations of product lines and service requirements. After consulting with Mr. Summers, Mr. Lorenzo works to put draft pricing quotes together to complete Interior Planning’s initial response to the RFP.

If Interior Planning submits a successful bid, each VP leads their respective teams in fulfilling products and services, as specified in the bid. Ms. North’s team works with architects, designers, movers, installers, etc. in laying out what needs to take place in the new office setting and executing the plan. Mr. Summers’ team works through the purchasing and procurement process with various vendors and suppliers specified in the proposal to obtain the best price and financial terms, order the correct amount and set a date for receiving, and following up to ensure that commitments are on track and fulfilled. Mr. Lorenzo’s team works with the entity purchasing Interior Planning’s office furniture and services at each step in the process to inform them of the process made and to work through necessary changes whether they originate from
Interior Planning or its client. The goal is to create satisfied clients and enthusiastic ambassadors of Interior Planning.

Interior Planning’s mission statement – “We aim to create the right work environment solutions for our customers.” “Right” solutions are those that meet the client’s aesthetic and performance needs at a price point where the client can realize value.

Planning at Interior Planning

Paul would meet annually, in January, with his management team. Mr. Mondello thought the most important time each year was spent by the team discussing the dynamics, internal and external, affecting the performance of Interior Planning. He recalled last year’s planning meeting as being particularly insightful.

The team believed their people to be their most important asset. Everything that Interior Planning does is directly or indirectly a service, an intangible delivered by people. Interior Planning is careful to commit to the resources necessary to train each employee to be able to deliver at the highest level required of their customer base. Paul and the team believed their efforts to recruit and retain high quality people were starting to pay dividends. Retention is particularly important. Longevity equals experience. Experience enables employees to better deliver the service promised to, and expected of, Interior Planning’s clients. Paul thought his people were particularly good at personal relationships. Their people can listen and then respond appropriately to clients. That is huge in developing satisfied clients. These effective relationships have also been established by lowering response time in delivering results expected by clients. Finally, the Interior Planning team was known as being honest. This builds trust.

Mondello’s management team is always attuned to each of their key constituencies. They focus on three – end-users, specifiers, and furniture vendors. The end-users purchase office
layout planning, furniture, delivery, and installation from Interior Planning and their competitors. The management team thought that they enjoyed particularly strong relationships with this group. The second group, specifiers, act like gatekeepers. They work with end-users to specify all of what goes into any given new office space. Depending on how the specifications are written, Interior Planning’s furniture vendors can be included or excluded. Specifiers can write Interior Planning out of any new business. If fact, they might never know, until it is too late, of business expansion that necessitates new office space. The best example of specifiers are move specialists, firms that contract with a company to plan every aspect of a company move into a new office space. Interior Planning offers this same service, but some firms prefer an independent advisor. The team believes that they do reasonably well with the specifier group, given that they can act as competitors. The third constituency group is the furniture vendors Interior Planning utilizes. Haworth is Interior Planning’s lead furniture vendor. The team recognizes that the Haworth brand is one of their strongest assets due to their name recognition and high quality.

At the latest annual planning meeting, the team renewed its commitment to improvement. They outlined two major areas for improvement – correcting unhealthy perceptions they’ve unwittingly created and fixing intermittent late deliveries. Perceptually, Interior Planning suffers from inaccurate perceptions based on how they’ve communicated to specifiers and end-users. Paul agreed with his team that, being perceived strictly as a furniture store, move manager, asset manager, or project manager in trying to win specific pieces of business, they failed to communicate the breadth of their offerings. This has lead to the perception of the firm being too small. They want to get the small business, but they can handle big clients as well. Being
perceived as a furniture store can be particularly problematic if end-users only think of Interior Planning for furniture and look at them only for lowest furniture prices.

Chris brought ratings reports showing a dip in ratings given Interior Planning by key constituencies for delivering product for new moves on time. Paul said, “I know that some of the ratings were unfair. We promised delivery, and then we’d have an issue with the installers or the office vendors. That wasn’t our fault, but the end-users don’t care. They blame us.” Paul thought Interior Planning should consider tracking technology to let all involved in a move access for themselves product routing. That might help solve the size problem and the blame for late deliveries.

The team identified two primary areas in marketplace conditions potentially favorable to Interior Planning. First, changes in information technology have affected the way offices are configured. Increasingly, office settings have changed in response to this by needing less individual space and more group and adaptable space. More flexibility in handling a workforce is required. In addition, space planning technology changes allow Interior Planning to move more quickly and stay on the edge in this industry. During the time of the change, the team noted that individuals making these decisions feel vulnerable. They want to be taken care of and kept informed as to the status of the jobs and any deviations from the announced schedule. Keeping the client “in the loop” eases their mind and enables the relationship to deepen between them and Interior Planning. A continuing trend in organizations is to reduce the workspace to employee ratio – doing more with less. This makes space planning particularly critical.

A second set of conditions revolve around specific geographic conditions. Interior Planning has strong relationships with many organizations that have weathered the economic storm and are in a position to expand. After the recent recession, many of these companies have
decided to make investments in their office settings to increase space or upgrade existing space. Little Rock has survived the purchase of Alltel by Verizon. In fact, the purchase has grown business for Interior Planning as Verizon made staffing reconfigurations. Heifer International’s new world-wide headquarters and the Clinton Presidential Library have been catalysts for attracting non-profits to the area. Northwest Arkansas has seen tremendous growth over the last several years.

Wal-Mart, one of the world’s largest corporations, is a major economic driver and caused many suppliers to locate to this area. Many new and existing businesses have taken advantage of the multiplier effect of Wal-Mart in the area. Jonesboro, Arkansas has grown tremendously in the specific areas of food service and processing and related distribution. Specifically, Nestlé located the largest distribution of its type in the world in Jonesboro. Other food services and processing firms locating in Jonesboro include Unilever, Butterball, Post, Frito-Lay, and Riceland. Interior Planning can benefit when growth necessitates office space changes. Additionally, vendors and suppliers are looking for ways to expand their business. General economic conditions in Central, Northeast, and Northwest Arkansas are better than the national average. Opportunistic vendors will look to partner with dealers such as Interior Planning who have an effective track record in this geographic area.

The team also discussed negative market conditions for Interior Planning. Local competitors offer furniture from quality national suppliers unavailable to Interior Planning. They represent different levels of competition. LaHornes competes on the price front by offering lower levels of service with lower quality furniture. Sherman Watson, with very low overhead carries the Herman Miller brand, a medium quality furniture manufacturer. Current Office is the closest and biggest Interior Planning competitor at similar price and quality levels.
Unfortunately, many view office furniture as a commodity with price alone the most important variable. Mondello knows that this threat must be combated by highlighting the service offering beyond furniture alone. Add to this mix are furniture manufacturers forcing the sales of more low to mid-range furniture through aggressive promotional tactics. This becomes a reinforcing message that contributes to the commoditization of office furniture and related services. “We MUST fight this,” said Mondello.
References


Non-Pricing Practices in Small Business

Paul Dunn, University of Louisiana at Monroe
Carl Kogut, University of Louisiana at Monroe
Larry Short, Northwestern State University of Louisiana

Abstract

This paper examines the non-pricing practices used by very small businesses and concludes that service, quality, and advertising/promotion are the most critical factors used to generate sales by small businesses in small towns and rural areas in northeast Louisiana.

Introduction

Previous research by Dunn, Kogut, and Short (2011; 2012) suggested that small businesses in northeast Louisiana use ways other than price to compete. The original study in 2011 was conducted using a questionnaire designed to indicate respondents’ agreement or disagreement with a series of questions regarding pricing practices. The replicative study was conducted in the same geographic area, but using a questionnaire designed to provide a better indication of the extent of influence the factors had on pricing decisions by owners/managers of small businesses. Both studies supported the premise that prices are generally not used by small businesses to generate sales. These businesses appear to be more interested in satisfactory profits and adjusting prices to meet rising costs or competitor’s decisions on pricing. Yet these businesses must compete every day with other similar businesses to stay alive. If they do not use pricing to attract customers, what factors do they use? This study attempts to identify the non-pricing factors used to generate sales by small business owners/managers in small towns and rural areas in northeast Louisiana.
Background

Economists promote well accepted theories to explain the behavior of firms in the competitive market place. These theories include the concepts of profit maximization and optimal pricing. For example, Bade and Parkin (2013) state that “A firm that does not seek to maximize profit is either eliminated or bought by other firms that do seek to achieve that goal.” Mankiw (2012) describes the pricing decisions of a firm as producing “…the quantity at which marginal revenue equals marginal cost and then uses its demand curve to find the price at which it can sell that quantity.” (p. 332).

Since these economic theories are usually postulated for large firms, the question arises do these principles also apply to small businesses as well? In a study of 88 small firms, Hayes (1964) found that many small firms did not attempt to maximize profits, but instead considered costs as a major factor in pricing decisions. Curran (1997), in a study of 20 small businesses, found that costs, not profit maximization, formed the basis for pricing decisions in small businesses. Dunn, Kogut, and Short (2011, 2012) in two studies of small businesses (in 100 and 75 small businesses, respectively) concluded that small businesses in northeast Louisiana follow many of the basic principles of economic theory in setting and maintaining prices for their products and services, but not profit maximization.

Marketing textbooks take a slightly different view of pricing practices. Pricing objectives from a marketing viewpoint include not only profit maximization, but also satisfactory profits, sales volume, meeting competition, etc. Discussions revolve around pricing products/service above, with, or below competitors. Pricing methods involve how to set prices specifically, that is, using a cost plus or demand based system of pricing. (See Boone and Kurtz, 2006; Lamb, Hair, and McDaniel, 2009; and Lascu and Clow, 2008)
Entrepreneurship and Small Business textbooks generally follow the basic marketing models of pricing, but use a more abbreviated model. (Baumbeck, Lawyer and Kelly, 1973; Ibrahim and Ellis, 1993; Hodgetts and Kuratko, 1995; Carland and Carland, 1998; Longenecker, Moore and Petty, 2000; and Scarborough, 2011). Dunn, Kogut, and Short (2011, 2012) support the marketing concept that costs and competitors’ pricing influence pricing decisions rather than profit maximization. Thus, research leads us to believe that small businesses seem to be strongly influenced by competitors’ pricing and costs factors in making pricing decisions, but do not strive for profit maximization.

Keat and Young (2009) suggest there are different ways, other than pricing, that firms can compete. These include areas such as advertising and promotion, location and distribution channels, market segmentation, loyalty programs, product development and special customer services. (pp. 367-368) Dunn, Kogut, and Short (2011, 2012), support this premise and conclude that “…non-price factors play a vital role in competing for business (in small towns and rural areas) but fail to identify what these critical factors were…” in their two studies of small businesses in northeast Louisiana.

**Purpose of Study**

The purpose of this study is to ascertain the critical factors of non-price competition used by very small businesses in northeast Louisiana when competing in the market for the sale of their products and services.
Research Methodology

Sample

The sample in this study consisted of 84 small business owners/managers in northeast Louisiana. Students in an entrepreneurship course at the University of Louisiana at Monroe in the Spring semester of 2012 were required to hand deliver questionnaires to owners/managers of very small businesses in their home towns and wait while the entrepreneurs completed the questionnaires, thus, the return rate of questionnaires was 100%. Table 1 shows the characteristic of the small business owners/managers surveyed. The sample was predominately male (71.4%), mostly middle aged (51.8% between 30-50 years old), and white (72.6%). The sample was also well educated (73.8% had some college or more), most were married (72%), and well experienced in business (about 64% had some experience in the line of business), while only 35.8% had 6 years or more of management experience.

<table>
<thead>
<tr>
<th>Table 1. Small Business People Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Race</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
</tbody>
</table>
The characteristics of the businesses in the sample are shown in Table 2. The businesses in the sample were primarily service (59.5%) and retail (38.1%). Most of the businesses (87.9%) had a market share under 50% and most (73.8%) were located in a small urban area. The sample consisted primarily of very small businesses (67.7% had 0-5 full-time employees) and almost one half of the sample (47.6%) had 5 or less competitors. These sample characteristic closely match the samples in Dunn, Kogut, and Short’s 2011 and 2012 studies.
<table>
<thead>
<tr>
<th>Type Business</th>
<th>Frequency</th>
<th>Percent</th>
<th>Market Share</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Retail</td>
<td>32</td>
<td>38.1</td>
<td>Under 10%</td>
<td>21</td>
<td>25.6</td>
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<td>Service</td>
<td>50</td>
<td>59.5</td>
<td>11-25%</td>
<td>23</td>
<td>28.1</td>
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<tr>
<td>Wholesale</td>
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<td>2.4</td>
<td>26-50%</td>
<td>28</td>
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<tr>
<td>Total</td>
<td>84</td>
<td>100.0</td>
<td>over 50%</td>
<td>10</td>
<td>12.2</td>
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<tr>
<td></td>
<td>Total</td>
<td>82</td>
<td>100.0</td>
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</table>

<table>
<thead>
<tr>
<th>Rural or Urban</th>
<th>Frequency</th>
<th>Percent</th>
<th>Full-Time Employees</th>
<th>Frequency</th>
<th>Percent</th>
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<td>Rural</td>
<td>22</td>
<td>26.2</td>
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<td>11 and over</td>
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<td>13.1</td>
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<td></td>
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<td>84</td>
<td>100.0</td>
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<table>
<thead>
<tr>
<th>Number of Competitors</th>
<th>Frequency</th>
<th>Percent</th>
<th>Part-Time Employees</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>None</td>
<td>10</td>
<td>11.9</td>
<td>0</td>
<td>32</td>
<td>38.1</td>
</tr>
<tr>
<td>1 – 5</td>
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<td>1-5</td>
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<tr>
<td>6 – 10</td>
<td>21</td>
<td>25.0</td>
<td>6-10</td>
<td>9</td>
<td>10.7</td>
</tr>
<tr>
<td>&gt;10</td>
<td>23</td>
<td>27.4</td>
<td>11 and over</td>
<td>5</td>
<td>6.0</td>
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<tr>
<td>Total</td>
<td>84</td>
<td>100.0</td>
<td>Total</td>
<td>84</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Questionnaire Development**

The questionnaire was designed to assess which methods of competition are used by owners/managers of very small businesses. The questionnaire was divided into two parts. The first part of the questionnaire was designed to determine the underlying values of the owners/managers concerning objectives of the pricing of products and services. Two questions were asked to ascertain the basic values system of small business owners/managers toward
profits, competition, market share, and costs. That is, do small businesses make their pricing decisions primarily to maximize profits, to cover their costs, to increase market share, or to meet competitive forces in their environment? The questions asked in this part of the study were identical to those asked in the 2011 study. That is, respondents were asked to indicate agreement or disagreement with a statement rather than indicate the extent of influence the factor had on the decision making process. Since these questions addressed the same issues that were studied in the 2011 research, we have included their results for comparability purposes.

The first part of the question was intended primarily to get the small business owner/managers to start thinking about their marketing practices. After responding to questions concerning factors impacting pricing decisions, respondents were then asked—in the second part of the questionnaire—to list three ways, other than price, by which they compete with firms in their market. The question was in free-style form where each respondent wrote in his/her responses.

Findings

Analysis of the results of this study reflects the practices of owners/managers of very small businesses in northeast Louisiana. The findings identify not only the critical factors in the pricing decision process but also the methods they use to compete in ways other than price.

Underlying Values in Pricing Decisions

Table 3 shows the attitudes of small business owner/managers toward the basic economic concept of profit maximization. Over one-half (57.7%) of the respondents suggest that their pricing decisions are driven by the concept of profit maximization, while nearly 84% state that their pricing decisions are made to attain a satisfactory profit. Respondents also understand the
necessity of being able to cover their variable cost as over 82% agreed with that statement, but only a little over 57% were focused on increasing their market share. These results are consistent with the previous research that showed small business manager/owners in northeast Louisiana were more intent on making a satisfactory profit rather than maximizing their profits, which is contrary to basic economic theory. The major difference between the findings in the studies are that respondents in the 2013 study are more concerned with covering variable costs and less concerned with market share than counterparts in the 2011 study. This could be a result of the very different economic outlooks between 2010 and 2012 when the surveys were conducted.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Percent of Respondents in the 2011 and 2013 Studies Indicating Agreement with the Statement: “When setting prices, I always try to…”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Maximize my profits</td>
<td>57.7%</td>
</tr>
<tr>
<td>Get a satisfactory profit</td>
<td>83.6</td>
</tr>
<tr>
<td>Cover my variable costs</td>
<td>82.4</td>
</tr>
<tr>
<td>Increase my market share</td>
<td>57.3</td>
</tr>
</tbody>
</table>

***Significant at greater than the 0.01 level

When small business managers/owners were asked to focus only on the impact of competition in setting pricing, most respondents appear to just want to get along. As shown in Table 4, over 64% of the respondents set their prices to closely match their competitors’ prices. This result is different than what was found in 2011. The decision to price consistent with competitors’ prices is even more often the case now.
Table 4

Percent of Respondents in the 2011 and 2013 Studies Indicating Agreement with the Statement: “In general, I try to set my price…”

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2011</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below my competitors’ prices</td>
<td>28.6%</td>
<td>33.6%</td>
<td>5.0</td>
</tr>
<tr>
<td>With my competitors’ prices</td>
<td>64.3</td>
<td>52.1</td>
<td>12.2**</td>
</tr>
<tr>
<td>Above my competitors’ prices</td>
<td>7.1</td>
<td>11.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

**Significant at greater than the 0.05 level

Thus, it appears that small business owners/managers in making pricing decisions for products and services do not consider profit maximization as their primary goal. A large majority of them appear to be primarily interested in making only a satisfactory profit by pricing their products and services at about the same levels as their competitors.

Non-Pricing Practices Used to Generate Sales

Table 5 shows the non-pricing factors used by small business owners/managers to generate sales in small towns and rural areas in northeast Louisiana. The 84 respondents in the sample listed a total of only 8 non-pricing factors they use to increase sales. It’s not surprising, since 60% of the businesses were service type businesses, that most respondents (74 of 84 respondents or 88.1%) identified “service” among their first three choices. Good service was apparently also important for the rest of the respondents as well, in that only 10 businesses (less than 12%) did not list “service” in their top three choices. Coming in second in the non-pricing factors used by small business owners/managers to generate sales was “quality,” with over 50% of the respondents (46 of the 84 respondents) identifying “quality” among their first three choices. The next two popular non-pricing factors used by small businesses (“advertising” and “word of mouth referrals”) were essentially tied for third place with 33.3% and 29.8% of the respondents, respectively, identifying these factors among their top three choices. In the broader
sense of marketing strategy, the process of getting information to your potential customers can be accomplished in many ways that include “advertising” and “word of mouth referrals.” Thus, it appears that some form of advertising is considered a very important factor by small businesses, since 63.1% (53 of 84 respondents) identified advertising and word of mouth referrals among their first three choices to attract sales.

<table>
<thead>
<tr>
<th>Compete Through</th>
<th>Mentioned at all</th>
<th>First Choice</th>
<th>Second Choice</th>
<th>Third Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>74</td>
<td>27</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Quality</td>
<td>46</td>
<td>17</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Advertising</td>
<td>28</td>
<td>15</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Word of Mouth, Referrals</td>
<td>25</td>
<td>6</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Specials, Discounts</td>
<td>14</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cleanliness, Atmosphere</td>
<td>13</td>
<td>2</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Product Variety, Brand Identity</td>
<td>12</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Online Contact</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>75</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

Other areas, such as specials, discounts, cleanliness, atmosphere, product variety, brand identity, and on-line contacts were listed by 55.9% (47 or 84 respondents) as one of their top three choices, but none of these factors rose to the level of importance of service, quality, and advertising.

**Conclusions**

This study supports previous research that concludes that very small business owners/managers in northeast Louisiana generally follow the basic principles of economy theory in setting and maintaining prices with the exception of profit maximization. In setting prices, small businesses appear to be strongly influenced by competitors’ pricing and costs factors. And an overwhelming majority of the small businesses try to compete in ways other than pricing.
This study identifies three major factors used to generate sales (other than pricing) by small businesses in northeast Louisiana. The most critical factor—with over 88% of respondents selecting this among their top three choices—appears to be the provision of good service to the customer. When you combine the factors of advertising and word of mouth referrals into the broader category of getting the word out to potential customers, this factor becomes the second most important factor— with 63% of the respondents selecting one of these two factors among their top three choices. The third most important factor is selling products/services of high quality—with almost 55% of respondents including this in their top three choices. Thus, it appears that small firms doing business in small towns and rural areas in northeast Louisiana rely primarily on good service, quality products/services, and some form of publicizing their product or service to potential customers to generate sales. Although other factors (specials, discounts, cleanliness, atmosphere, product variety, brand identity, and on-line contacts) were identified as important in generating sales, none of them rose to the critical importance level of service, quality, and advertising. It is interesting to note, in this new world of interconnectivity, so few small businesses use on-line contact to attract customers. It would appear that, at least in the small towns and rural areas of northeast Louisiana, even where supposedly everyone knows everyone else, a personal outreach using the internet might be quite effective in generating sales.

The small sample size along with the limited geographic nature of the population restricts the applicability of the findings of this study to a broader population. The study however, does offer some interesting insights to non-pricing practices of very small businesses in lightly populated areas where most of the local businesses are service and retail establishments.
References


Operational Strategies for Productivity and Quality in a Transition Country: Interviews of Romanian Managers

Daniel Glaser-Segura, Texas A&M University San Antonio

Abstract

In the early 1980s a renewed focus on operations management strategy was underway in manufacturing organizations in the industrialized nations. The focus was the result of increased cost and quality competition among Western European, Japanese, and U.S. manufacturers (Abernathy, Clark, and Kantrow, 1981). This notion of operations strategy was often coupled with the newly introduced Japanese manufacturing practices, referred to here as high performance management practices (Schroeder and Flynn, 2001). These practices were designed largely to continuously improve the performance of the competitive priorities to realize the new operations strategies.

Within a few years, in an unrelated series of events, many countries in the Soviet Bloc of influence, discarded many elements of state control of economic activity. In 1990, Romania, one of these Soviet Bloc countries, began its transition away from a centrally planned economic system. The transition consisted of privatizing state owned enterprises. These privatizations induced organizational leaders to develop strategies to survive in a new competitive marketplace. The privatizations required new types of operational strategies to improve productivity and quality to provide customers along the supply chain with added valued. The old approach to strategy in a centrally planned economy was based on national level stratagems developed by central planning administrators. The planners made decisions involving resource allocation, supply chain structure, process technology, capital purchases, and work force requirements for...
entire industries. Central planning disallowed competition among companies and few strategic decisions were required at the plant level.

Romania, as many other transition economies, is increasingly in a position that requires higher levels of efficiency and quality to compete with global peers in Central and Eastern Europe (CEE), Latin America, Asia, and South Africa. Its recent membership in the European Union in January of 2007 also specified that it must perform according to guidelines that constrain manufacturing practices. While economy-wide data is available for Romania regarding competitive improvement, there is scant discussion in the literature regarding how organizations and their managers actually approach strategic operational strategy to improve productivity and quality. The experience from the industrialized countries shows that approaches to operations strategy continues to evolve.

In this study a discussion of the literature provides an overview of operations strategy and high performance manufacturing practices, the command economy legacy, and current management of operations in Romania. The analysis is based on face-to-face structured interviews of senior managers at 22 Romanian production plants in a variety of production environments. Senior managers were asked four principal questions:

1. What has been done in the last three years to improve productivity?
2. What will be done in the next six months to improve productivity?
3. What has been done in the last three years to improve quality?
4. What will be done in the next six months to improve quality?

In addition to these questions, the managers were asked to provide a history and industrial profile of the organization.

The study employed a qualitative research design allowing for the description of the operational strategy efforts as perceived by the respondents (Yin, 2003). Attention to Romania
was considered important because of its relevantly recent transition to a market economy, its involvement as an initial participant in surviving in a market economy, and because of the researcher’s unique ability to access those participating in the study. Studying this group through qualitative methods allowed a deeper and richer picture of operational strategy; that is, the ‘how’ and ‘why’ of the adaptation of high performance management practices (Yin, 2003). The qualitative research design used the recognition of a theoretical base (i.e., lens) as a starting point from which to explore the phenomenon of interest (Yin, 2003). We propose that the shift in paradigm prompted by transition of the Romanian economy from a centrally planned to a market economy is a radical change effort.

Following the analysis, a taxonomy of strategic operational practices and an agenda of future research for Romania and other transition economies are discussed.
References


Measuring the Innovation Degree in Small and Micro Enterprises in Sergipe State, Brazil

Dr. Rivanda Meira Teixeira - Federal University of Sergipe, Brazil
Ana Teresa da Silva Néto – SEBRAE-SE

Introduction

In Brazil, small and micro businesses make up 99% of all companies and provide 51.63% of the country’s jobs (SEBRAE, DIEESE, 2011). These businesses are vitally important when it comes to creating new jobs. Their importance can be seen in the Labor Yearbook which showed that in 2009 154,157 new companies were established for 2010, of which 96.2% were small and micro businesses. The trade sector has the highest number of establishments (51.5%) and provides the highest number of jobs (41.3%), followed by the services sector, which accounts for 33.3% of the number of establishments and employs 27.1% of the population (SEBRAE, DIEESE, 2011). Finally, the industry and construction sectors, respectively, have 10.7% and 4.5% of the total establishments of small and micro businesses and employ 23.3% and 8.2% of the population. According to Caloète (2009), these companies currently have the profile of active economic agents.

According to the GEM (2011), Brazil has the third highest rate of established entrepreneurs (12.23%). The study also shows that in Brazil business is begun because entrepreneurs detect an opportunity. For every company opened because a worker needed to invest in his own business, another 2.24 open as a result of the vision of an entrepreneur who glimpses an opportunity in the market. However, when it comes to analyzing the innovation of business by Brazilian entrepreneurs in the early stages, Brazil falls below the average of the 54 countries in the study when the novelty of a consumer product or the competition it faces is
analyzed. The study in question shows that innovation remains incipient in the daily lives of companies, and Brazilian entrepreneurs innovate their businesses on a small scale (GEM 2011).

According to authors such as Kruglianskas (1996); Fishlow (2002), Benedetti (2006); Ferreira, Marques and Barbosa (2007) and Brito, Brito and Morganti (2009), innovation is a key factor for companies to become competitive. Along the same lines, Porter (1996) affirms that a company can only obtain better results than its competitors if it has a factor that sets it apart and is maintained over time. Innovation or innovative acts are the main instruments for creating this competitive advantage.

In Brazil, although Federal Laws 10.973 and 11.487 and a number of state laws encourage innovation by companies, cooperation between companies and universities, the use of tax breaks and economic subsidies for innovation, many small businesses are unaware of them or experience difficulty when it comes to gaining access to the benefits of these laws. This is shown in the Technological Innovation Study (PINTEC), considered the most important national study on innovation. It was conducted by the Brazilian Institute of Geography and Statistics-IBGE, and identifies the indicators for innovation in Brazilian companies. The results show that these government instruments to support innovation are used very little by companies. The least used instruments by innovative companies in the industrial sector were: economic subsidies (0.5%); funding for R&D and technological innovation in partnership with universities or research institutes (0.8%); and the Law on R&D and technological innovation (1.1%). The percentage of small industries that took advantage of this Law was 0.5%, while for larger companies the rate was 16.2%. Larger companies benefited to a greater extent from these instruments (IBGE, 2010).
The Brazilian Service for Supporting Small and Micro Businesses (SEBRAE) was concerned with innovation and made the promotion of innovation in small and micro businesses one of its priorities (SEBRAE 2008). SEBRAE, believing that innovation can be adopted as a strategy for companies to improve their competitiveness, created the Local Innovation Agents Project (ALI). The aims of this project were to encourage innovation in the business culture of these companies in an effort to improve their competitive capacity and encourage them to develop closer links with science and technology institutions with expertise in specific fields of knowledge to facilitate the transfer of technology, develop research projects in partnership or implement innovative solutions for companies. However, to begin working with small and micro businesses in this project, it was necessary to establish the degree of innovation of these companies. The assumption adopted in this study is that the degree of innovation in small and micro businesses can be measured using the thirteen dimensions in the model prepared by Sawhney, Wolcott and ARRONIZ (2006) and Bachmann and Destefani (2008).

Considering the context, the study proposes an analysis of the degree of innovation in small and micro businesses in Sergipe State that participated in the ALI Project. The specific aims of the study are to measure the degree of innovation in small and micro businesses in Sergipe, classify the companies in the typology as systemic innovators, occasional innovators and low innovators. The study also aims to compare the degree of innovation of the companies under study in the first stage with the companies in the second stage, which were involved in the ALI Project.
Brazilian Small and Micro Businesses

Generally, the size of a company is measured by the number of people who work for it. However, this measurement varies from country to country and is not standardized. According to Torrès (1999), in some countries, in addition to the number of employees and volume of business, companies are classified according to their market quota. Some studies group companies into small and micro businesses, others into small and medium-sized businesses and others into micro, small and medium-sized companies.

According to Campos et al. (2009: 4), the definition of “small and micro businesses varies according to the methodology adopted by each country, more specifically by the size of each market. Countries with a developed economy, such as the United States, identify them as having 500 employees or fewer.” However, in developing countries, where the market and indicators of the size of organizations are smaller, small and micro businesses employ from 100 to 250 workers. The authors claim that, when it comes to the formation of economic blocks, there is a growing consensus as to the classification of small and micro businesses.

In Brazil, despite the large number of small and micro businesses, there is no consensus regarding their size. Two non-exclusive criteria are used: the number of employees and the gross annual revenue. The representative agencies of the sector and research institutes use either the number of employees or gross annual revenue. Meanwhile, financial institutions, such as the National Bank of Economic and Social Development (BNDES), Bank of the Northeast of Brazil (BNB), and others, use the gross annual revenue.

SEBRAE used to use the number of employees to classify the size of a small or micro business. However, it changed to the gross annual revenue in accordance with Complementary
Law 123, the National Statute for Small and Micro Businesses, also known as the General Law on Small and Micro Companies, sanctioned in December 2006. Complementary Law 139 of 10 November, 2011 alters the revenue ceiling for a small and micro business as of 1 January 2012. Table 2 summarizes the criteria adopted by some institutions to define small and micro companies in Brazil.

### Table 1 – Criteria for classifying small and micro businesses in Brazil - 2012

<table>
<thead>
<tr>
<th>Institution</th>
<th>Economic Activity</th>
<th>Industry</th>
<th>Trade/Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IBGE</strong></td>
<td>Number of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro</td>
<td>0-19</td>
<td>0-9</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>20-99</td>
<td>10-49</td>
<td></td>
</tr>
<tr>
<td><strong>SEBRAE and BNB</strong></td>
<td>Gross Annual Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro</td>
<td>R$360,000 or lower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>From R$360,000 to R$3,600,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BNDES</strong></td>
<td>Gross Annual Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro</td>
<td>R$2,400,000 or lower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>From R$ 2,400,000 to R$16,000,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Based on information obtained from the IBGE (2012), SEBRAE (2012), BNB (2012) and BNDES (2012)

The types of classification given to small and micro companies differ in number of employees and gross annual revenue, considered quantitative criteria. These differences can be attributed to the purposes for which these institutions intend to interact with these companies. In general, for tax purposes and access to credit, the criterion used has been the gross annual revenue. For studies, research and statistics, the number of employees has been used.
Small technological companies should not be placed in the same classification as a small company manufacturing traditional products, since the former generally participate in public notices to obtain public resources, participate in bidding, form partnerships with universities, depend on specialist collaborators and invest in R&D. However, small companies manufacturing traditional products, unlike technology companies, invest a great deal in unskilled labor.

According to data provided by the Ministry of Labor and Employment (TEM), small and micro businesses were responsible for 62.3% of the net balance of jobs created in September 2011. The sectors that contributed most to this positive performance were the service and trade sectors and the manufacturing industry, in that order. Companies that employ up to four workers were responsible for 56.1% of the total balance of jobs in September 2011. These data confirm the relevant role of small and micro businesses in the creation of jobs in the country (SEBRAE, 2011).

Concerning wages and salaries, in the universe of small and micro businesses in Brazil, trade pays the lowest average wages when compared to the other economic activities. However, in the whole set of small and micro businesses, this sector has the highest number of establishments (51.5%) and jobs (41.3%) (SEBRAE, DIEESE, 2011).

Sergipe is no different from the rest of the country in this sense. Small and micro businesses have 30,448 establishments, representing 98.7% of the total number of companies in the state. The most representative sector is trade, with 55.6%, followed by services 28.5%, industry 10.1% and construction 5.8%. Regarding the creation of jobs in Sergipe, trade is the economic sector that creates most jobs, with 40,569 (41%), followed by services, with 28,363 (28.7%), industry, with 17,232 (17.4%) and construction, with 12,726 (12.9%)
Innovation and Small Businesses

There is some controversy over the relationship between the size of the company and its level of innovation. Several studies on this topic claim that large companies have greater capacity for innovation because they have R&D laboratories. According to Pavitt (1984), innovation is linked to the large and growing size of companies with intense production because innovation is a result of a drive for growing economies of scale in production. According to Alsaaty (2011), the innovation strategy for small companies, because of limited resources and the need to achieve growth, is the market, i.e., clients are the focus of a business when it comes to innovative activity.

In the opinion of Hobday (1994 *apud* Lastres *et al.* 1998), small businesses do not have the necessary complementary assets for innovation in a mass production market and find it difficult to achieve results from innovations. Large companies rarely share their essential capacities within the network for economic, technological and strategic reasons.

In agreement with the line of reasoning of the importance of R&D to companies, Vuola and Hameri (2006) argue that R&D strategy is the element that most strongly reflects the efforts of innovative organizations. This is proved in the study conducted by Pacagnella Júnior *et al.* (2010) involving companies in the capital goods industry, where small companies made up 91.2% of the sample. The results showed that some of the factors that positively influence technological innovation for products and processes are specific departments or laboratories for R&D, cooperation in R&D and sources of information for innovative activity. However, owing to the high cost of investments in R&D, doubts over possible financial returns and the viability of production on a small scale, small businesses should seek partnerships with universities and S&T centers to make R&D viable.
It is indeed true that it is more difficult for small businesses to innovate. The data presented in the report entitled “Technological Development and Innovation in Small and Micro Businesses: Influencing Factors”, prepared by the Permanent Forum of Small and Micro Businesses (2007), touch on issues that hinder technological development and innovation in small and micro businesses, especially the following difficulties: insufficient technical knowledge on the part of these companies, dependence on suppliers of the main innovative technological inputs, low level of investment in R&D in comparison to what is actually required, little tradition when it comes to investing in technological development, high cost of acquiring innovations, difficulty in accessing lines of credit to purchase equipment, little contact with technological centers and lack of adequate physical infrastructure and staff.

According to the Oslo Manual, financing can be a determining factor for innovation in small businesses, which often lack funding for innovative projects as they have less easy access to external financing than large businesses (OECD, 2005). However, Botelho, Carrijo and Kamasaki (2007) claim that the smaller the company, the more innovative it is. They highlight that the factors that favor innovation in small businesses are their location in local productive arrangements and their closeness and interaction with R&D institutions.

To Benedetti (2006), small companies use innovation for the ongoing growth and development of business. In his study, he found that innovative actions make an important contribution to the growth of the company and that its owners are constantly seeking to develop small innovations to ensure the competitiveness and profitability of their company.

Silva et al. (2003) conclude in their bibliographic study on the role of innovation in companies of different sizes that small and medium-sized companies have advantages and are
more successful because of fewer human resources, greater flexibility, the concentration of
efforts and internal communications. However, large companies stand out in a number of sectors
because of their investments in R&D, marketing and the financial structure to project when the
right time will come to launch the product on the market. Nevertheless, according to Barañano
(2005), it is not the size of a company that determines whether it is innovative but other
characteristics such as the structure of the workforce, strategy, partnerships with other companies
and universities and the internal organization of the company.

Therefore, irrespective of the discussion over the relation between size (micro, small,
medium-sized or large) of the company and its facility to innovate, the innovative capacity of the
company stems from the attitudes of the business management of each company. By making
systematic investments in R&D, increasing the development of innovations in products and
processes, practicing innovative forms of management, seeking ongoing improvement in skills
for technical staff and forming a closer bond with universities and research centers, companies
can have better chances to become more innovative than the rest.

**Measuring the Innovation Process in Companies**

In the literature there are several studies with different methodologies that offer proposals
for measuring a company’s level of innovation. Each methodology focuses on one aspect or on a
set of aspects regarding the dimensions to be used for the purposes of measuring.

The most common way of measuring innovation is through the resources (financial and
human) dedicated to R&D and patents. However, this has been subject to controversy
(DACORSO, 2000). According to Figueiredo (2004), the indicators for R&D and patents have
their limitations. They are irrelevant for companies in an emerging economy, such as Latin
America, since companies in general do not have sophisticated levels of technological capacity for conducting activity involving R&D and patenting.

According to Andreassi (2003), small companies (with the exception of technological companies), unlike large companies where innovation is based on R&D, have their innovation activities connected to the production line, activities related to the adaptation of technologies acquired from outside the firm or small improvements implemented by the industrial engineering staff. Andreassi and Sbragia (2002), in their study entitled “Factors to Determine the Degree of Innovation in Companies: a study utilizing the discriminant analysis technique” involving small, medium-sized and large companies, selected the following indicators: 1) R&D expenditure according to revenue (%); 2) number of doctoral degrees, master’s degrees and graduate degrees among employees (%); 3) number of patents requested and/or granted by number of employees, etc. The authors conclude that the number of employees allocated to R&D is the major differential for more innovative companies over the less innovative.

On the other hand, Bachmann and Destefani (2008) argue that the number of patents and the percentage of revenue earmarked for R&D are not adequate for small and micro businesses because these companies in general do not channel resources into R&D, have no holders of doctorates or master’s degrees on their staff and do not request patents. Chart 1 portrays some of the dimensions used to measure innovation in small, medium-sized and large companies.

**Chart 1 – Dimensions used to measure innovation**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tidd, Bessant &amp; Pavitt</td>
<td>1) vision and leadership for innovation; 2) appropriate organizational structure;</td>
</tr>
<tr>
<td></td>
<td>3) key roles for innovation in the organization; 4) training; 5) involvement of people; 6) preparation of the team for innovation; 7) creative climate; 8) external focus; 9) multidirectional and multichannel communications and 10)</td>
</tr>
</tbody>
</table>

Mendel, Oliveira & Mendel (2004) 1) physical environment; 2) communication; 3) organizational structure; 4) freedom and autonomy 5) team work; 6) participation; 7) management; 8) availability of resources; 9) recognition and reward; 10) strategy for new products and services; 11) training and development and 12) organizational learning.

Silva, Hartmann & Reis (2006) 1) entry; 2) exit; 3) forms of innovation; 4) sources of innovation and 5) impacts of innovation.

Scherer & Carlomagno (2009) 1) leadership; 2) strategy; 3) relationships; 4) culture; 5) people 6) structure; 7) processes and 8) funding.

Sawhney, Wolcott & Arroniz (2006) 1) offer; 2) platform 3) brand; 4) clients; 5) solutions; 6) relationships 7) adding value; 8) processes; 9) organization; 10) supply chain; 11) presence and 12) network.

Source: Prepared by the author based on a review of the literature (2011)

Viotti and Macedo (2003) claim that the development of the indicators of science, technology and innovation requires the definition of measurable variables and their function in the processes of the production, diffusion and use of knowledge. The present study used the dimensions proposed by Sawhney, Wolcott and Arroniz (2006), complemented by the innovative environmental value (BACHMANN & DESTEFANI, 2008) to measure the degree of innovation in small and micro businesses in Sergipe State that participate in the Local Innovation Agents Project.

**The Local Innovation Agents Project (ALI)**

The Local Innovation Agents Project (ALI) was founded by SEBRAE based on the Indian methodology of knowledge transfer for the formation of a culture of innovation in the management of small and micro businesses (SEBRAE, 2010). The principal aim of the ALI
Project was to improve the competitiveness of small and micro businesses by spreading information on innovation, technology and the application of solutions in accordance with the characteristics and features of each business, making a direct impact on business management, improvement of products and processes and the identification of new market niches for these products and services. The ALI Project references the Oslo Manual (OEDC, 2005), which deals with the types of innovation that are currently accepted.

The ALI Project is in six stages: raising awareness of entrepreneurs to participate, registration of businesses, application of the business diagnosis, application of the innovation diagnosis, preparation and presentation of the work plan and implementation of the actions required by the businesses.

In Stage 1, entrepreneurs are encouraged to join the ALI Project. The first point is to raise awareness, encourage and select companies to take part in the Project. There are many ways of doing this, including holding lectures, publicity campaigns, forming partnerships with business leaders and making visits to companies.

In State 2, companies sign up for the ALI Project. Businesses commit to the project and sign a term of agreement (Annex B) for the purpose of implementing actions that will be proposed in the work plan. The local innovation agent makes an appointment to submit the questionnaires of the business diagnostic and innovation diagnostic.

In Stage 3 of the business diagnostic, a questionnaire is given to the company for the purposes of getting to know and evaluating the organization of the business by analyzing factors linked to the business management, environmental management, adding value to the brand, information technology, production management, health and safety in the work place, metrology,
quality and innovation management. The main objective here is to gather information to facilitate the effort to find solutions to improve management and enable the diffusion of innovation within the company.

In Stage 4, the measurement of the degree of innovation, the questionnaire is applied to the business. This questionnaire is referred to here as an innovation diagnostic for measuring the degree of innovation of the company and identifying which innovative activities are being developed by the company.

In Stage 5, the work plan is prepared based on the results of the business diagnostic and the measurement of the level of innovation. The work plan is then handed to the entrepreneur. The plan includes actions for improving the venture and innovations based on what is found to be lacking in the innovation diagnostic.

Stage 6 proceeds to the implementation of the actions needed by the companies. These actions have been prioritized in the work plan. It will fall to the local innovation agent to bring the company closer to an institution or company that possesses the knowledge, referred to as the solution provider. This The business diagnostic aims to become familiar with and evaluate the organization of the business using six dimensions: 1) business management; 2) environmental management; 3) adding value to the brand; 4) information technology; 5) production management and 6) innovation management. Its main purpose is to gather information that facilitates the drive for solutions in order to improve management and spread innovation within the company. The evaluation in conducted using the dimensions, which are composed of variables and will be awarded points in accordance with the following criteria: Three (3) points when the variable fully complies with all the requirement and objective evidence for this can be
identified; two (2) points when the variable meets the requirements but objective evidence is lacking; one (1) point when the variable does not meet any requirements and zero (0) when the question is not applicable. Each dimension has a different number of variables and for this reason the points system is different. The Business Management dimension (Strategies and Plans; Leadership; Clients and Market; Relationship with Suppliers; Partnership; Finance and Costs; People) has a maximum of 162 points; Environmental Management has a maximum of 21; Adding Value to the Brand has a maximum of 21; Information Technology has a maximum of 18; Production Management (Production Management; Waste Reduction; Health and Safety of Workers; Metrology; Quality) has a maximum of 93 and Innovation Management has a maximum of 30. The total number of points is 345.

The solution provider plays a key role in the Project because the effectiveness of the innovation and consequently its success will depend on the solutions provided. When the solution provider has been identified, it will fall to him to present a proposal to put into action. This proposal should contain the scope of the work required, how the service will be provided, the deadlines, predicted results, investment and other necessary information. Once the proposal is approved by the entrepreneur, it will fall to the solution provider to implement the action, which will also be monitored by the local innovation agent.

Innovation Diagnostic Model

The innovation diagnostic aims to measure the degree of innovation in the company and identify the innovative activity that it is developing. The tool is based on the Innovation Radar developed by Sawhney, Wolcott and Arroniz (2006) and contains 12 (twelve) dimensions with which a company can seek opportunities to innovate. It is worth pointing out that this instrument was developed following interviews with managers responsible for innovation-related activities in a number of large companies.
According to Sawhney, Wolcott and Arroniz (2006), the Innovation Radar consists of four key dimensions that serve as business anchors: 1) the offers that the company creates; 2) the clients it serves; 3) the processes it employs and 4) its point of presence for putting its offers on the market. Into these four anchors a further eight dimensions of the business system were incorporated (platform, brand, solutions, relationship, adding value, organization, supply chain and network) that may serve as a bias of persecution. The tool was complemented by Bachmann and Destefani (2008), with the innovative ambience as an organizational climate that is favorable to innovation is required.

This tool was adapted for use in the ALI Project. According to SEBRAE (2010, p. 6), “the adopted methodology views innovation not as an event or isolated fact, but rather the fruits of a process. Thus the concern over evaluating not the simple result, i.e., number of innovations, but the maturity of the innovation management process in companies”. The Innovation Radar (Figure 1) includes the following dimensions: 1) offer; 2) platform; 3) brand; 4) clients; 5) solutions; 6) relationship; 7) adding value; 8) processes; 9) organization; 10) supply chain; 11) presence; 12) network and 13) innovative ambience.
The indicator, resulting from the median value of each innovation dimension provides a useful measurement for determining the degree of innovation in small and micro businesses. The Innovation Radar in Figure 1 shows the strong and weak points in relation to the dimensions under study and enables immediate action in the dimensions for which the company has the most serious problems and which, in theory, should be the first to be overcome.

A company’s degree of innovation is measured using the dimensions that are composed of variables and which, having been analyzed, will be awarded points in accordance with the following criteria: five (5) points when the variable is systematic or common; three (3) points when the variable is present occasionally and one (1) point when the variable is not present or is non-existent.

The degree of innovation (DI) of the companies was calculated based on an evaluation of each of the variables that make up the thirteen dimensions under study in the innovation
diagnostic (ID). The degree of innovation of a company is obtained by dividing the sum of the values of the medians obtained from each dimension by the total number of dimensions (13). The DI of all the companies is obtained by dividing the sum of the medians of each dimension of all the companies under study by the total number of dimensions (13).

The methodology of the ID based on the model by Sawhney, Wolcott and Arroniz (2006) and complemented by Bachmann and Destefani (2008) considers that for a company to be innovative, it cannot score less than three in the thirteen dimensions. Companies with developing innovation are those that have innovated in the last three years, but which have no systematization of the process and their results on the innovation radar lie between 2 and 3 in the thirteen dimensions. A company with a value of 1 in all the dimensions has little or no concern with innovation (SEBRAE, 2010).

Therefore, companies are classified into three groups, according to their degree of innovation. The lowest point for DI is 1 and the highest is 5. Companies with 4 or more points are defined as systemic innovators because they systematically practice innovation management. Companies with a DI between 3 and 4 points are defined as occasional innovators. These companies have innovated in the last three years, but the process has not been systematized. Companies with a DI of between 1 and 3 are defined as low or non-innovators. These are companies that innovated very little or not at all. Chart 2, below, shows the types of company and the criteria used in the classification.

**Chart 2 – Classification of companies by number of points in their degree of innovation**

<table>
<thead>
<tr>
<th>Type of Company</th>
<th>Definition</th>
<th>Points for Degree of Innovation (DI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Systemic Innovator</strong></td>
<td>Systematically practices innovation management.</td>
<td>DI of 4 points or higher.</td>
</tr>
</tbody>
</table>

165
Occasional innovator | Innovated in last three years but with no systematization of the process. | DI between 4 and 4 points.
---|---|---
Low or non-innovator | Little or no innovation. | DI between 1 and 3 points. With 1 point, the company is not an innovator.

Source: Based on the proposed methodology model (2011)

There now follows a description of each of the dimensions included in the innovation diagnostic.

**Offer:** Offer has to do with products. This dimension of the model considers a company as innovative when a substantial part of its revenues is associated with new products/services. To calculate this, the following variables were used: a) new markets; b) new products; c) audacity; d) response to the environment; e) design and f) technological innovation.

**Platform:** This dimension evaluates the ability of the company to use the same infrastructure processes to offer different products/services as it reflects greater capacity for innovation. For this calculation, the following variables were considered: a) production system and b) versions of a product.

**Brand:** Innovation in this dimension means exploiting the brand to create other business opportunities or use other business to add value to the brand. A trade mark also indicates the innovative potential of the company. To calculate this, the following variables were taken into consideration: a) brand protection and b) brand leveraging.

**Clients:** This dimension identifies the needs of clients and new markets and listens to suggestions from clients. The adequate use of this information is an innovative differential for companies in a competitive market. For the calculation the following variables were
considered: a) identification of needs, b) identification of markets, c) use of clients’ statements regarding processes and d) use of clients’ statements regarding results.

**Solutions:** This dimension is concerned with the customized and integrated combination of goods, services and information that can solve a client’s problem. It involves the offer of a complementary product/service to the public, creating new opportunities for revenue. It was calculated considering the following variables: a) complementary solutions and b) integration of resources.

**Relationship:** This dimension has to do with how easy it is for a client to Access the company. The following variables were used in its calculation: a) facilities and amenities and b) computerization.

**Adding Value:** This dimension has to do with new ways for the company to generate more revenue. It analyzes information or interaction with clients, suppliers and partners. To calculate this dimension, the following variables were used: a) use of existing resources and b) use of opportunities for interaction.

**Processes:** This dimension has to do with using modern management methods and instruments such as certification, management practice or modification for procedures to increase efficiency, quality, flexibility, lower production cycle-time and fewer benefits for third parties. For the calculation, the following variables were considered: a) improved processes; b) management systems; c) certifications; d) management software; e) environmental aspects and f) management of residue.

**Organization:** This dimension analyzes how the company is structured, its partnerships and the reorganization of responsibilities. For the calculation, the following variables were used: a) reorganization; b) partnerships; c) external vision and d) competitive strategy.
Supply Chain: This dimension includes logistic aspects such as transport, storage and delivery. The supply chain variable was used for the calculation.

Presence: This dimension has to do with distribution channels that the company uses to put its goods/services on the market and locations where they may be acquired by consumers. For the calculation, the variables used were: a) points of sale and b) new markets.

Network: This dimension has to do with aspects related to the network that links the company and its products/services to its clients. Dialogue with clients is the variable used for its calculation.

Innovative Ambience: This dimension deals with how innovative practices are encouraged through the internal environment of the business. For this calculation, the variables used were: a) external sources of knowledge I; b) external sources of knowledge II; c) external sources of knowledge III; d) external sources of knowledge IV; e) intellectual property; f) innovative audacity; g) funding for innovation and h) collection of ideas.

Methodology

This study can be considered longitudinal because the data were collected in two stages. In the first stage the degree of innovation was measured for the 1,260 companies included in the study. The businesses were classified according to the proposed typology and the correlation level between the results of the business diagnostic (BD) and the degree of innovation was gauged. To calculate the degree of innovation, it is necessary to apply the innovation diagnostic (ID) to each of the companies.

In the second stage, the work plan was concluded. This is a document that is presented to the entrepreneur in the ALI Project by the local innovation agent. It contains the results of the business diagnostic, measurements of the company’s degree of innovation and a preliminary
proposal for a plan of action for the company. The second stage of the study was conducted to
gauge whether the degree of innovation of businesses following their involvement in the ALI
Project had increased. The innovation diagnostic was applied to 560 businesses and their degrees
of innovation of every one of them were measured. The degree of innovation of these businesses
was then compared with the degrees of innovation in the first stage of the project.

In this study, the following instruments were used: the questionnaire of the business
diagnostic (BD) and the questionnaire of the innovation diagnostic (ID). The BD questionnaire is
in ten parts, with open-ended and closed-ended questions. The first part has to do with the
registration data of the business and the second to seventh part have questions that evaluate the
following dimensions of the companies: Business Management; Environmental Management;
Adding Value to the Brand; Information Technology; Production Management and Innovation
Management. Each dimension is composed of a set of variables that are awarded 0, 1, 2 or 3
points according to the criteria adopted in the BD. The eighth part of the questionnaire deals with
the viewpoint of the entrepreneur regarding the company’s priorities and describes which
obstacles might appear. The ninth part involves photographic registers of the company and the
final part is a SWOT analysis, describing the strong points, points that could be improved, threats
and opportunities.

The Innovation Diagnostic (ID) Questionnaire is in three parts: Block I deals with
questions related to the company’s profile and contains essential information about the company
(corporate name, trade name, business registration number, address, telephone number, national
economic activity code number, number of employees and type of clients; Block II calculates the
degree of innovation and contains thirteen dimensions with forty-two objective questions. Each
dimension is composed of a set of variables that are awarded 1, 3 or 5 points according to the
criteria of the ID; Block III contains open-ended questions that can aid the analysis of the innovative environment in the companies.

The population of the present study is made up of the small and micro businesses in Sergipe State that participated in the Local Innovation Agents Project, a total of 1,260 small and micro businesses. These businesses were selected for the project because of their participation. They were not selected at random. These data were found in the registry of the ALI module Client Services System, which is the database maintained by SEBRAE/SE. This population of 1,260 companies was the bases for calculating the degree of innovation in the first stage of the study and represented 4.1% of the small and micro businesses in Sergipe State (SEBRAE/DIEESE, 2011). In the second stage, 700 companies were removed from the original population of 1,260 companies because they had not concluded their work plan by 31 March, 2011. Therefore, 560 businesses remained for the second stage. The work plan is the document presented to the entrepreneur in the ALI Project and contains the results of the business diagnostic, the company’s degree of innovation and the preliminary proposal for a plan of action. These 560 companies in the second stage were stratified by production chain, with 157 companies in the food chain, 120 in the textile and clothing chain, 119 in the construction chain, 103 in the health care chain and, finally, 61 companies in the wood and furniture chains.

Data were collected on the spot local innovation agents, who personally interviewed each of the proprietors of the businesses participating in the ALI Project. The first collection of data for Stage 1 of the study occurred between November 2009 and July 2011, with two questionnaires being applied to the entrepreneurs by the agents during personal interviews. These questionnaires were the business diagnostic (BD) and the innovation diagnostic (ID). The second
collection of data took place between August 2011 and October of the same year, with only the diagnostic innovation being applied by the agents to the proprietors of the businesses.

To gauge the correlation level between the business diagnostic and the degrees of innovation in the companies, the correlation coefficient was used. The correlation coefficient is used to gauge the linear association between two quantitative variables, X and Y. The correlation coefficient quantifies on a dimensionless scale the degree of interrelationship between two variables (the higher the coefficient model, the more intense the linear association between the two variables). This scale, in absolute value, ranges from 0 to 1.

**First Stage: Degree of Innovation of Small and Micro Businesses**

The degree of innovation of the companies in the first stage was calculated from the evaluation of each of the variables in the thirteen dimensions in the innovation diagnostic (ID). The average degree of innovation was obtained by dividing the sum of the average values of each dimension of each company under study by the total number of dimensions. The average degree of innovation of the companies in question was 2.01. According to the proposed classification, these companies can be classified as low innovators because, as the average degree of innovation of the companies in question was 2.01, their result lies between 1 and 2.99.

Some analyses were conducted with the key dimensions (offer, clients, processes and network) in accordance with the model proposed by Sawhney, Wolcott and Arroniz (2006) and the innovative ambience dimension proposed by Bachmann and Destefani (2008). Table 2 shows the total average points obtained by the 1,260 small and micro businesses in each of the thirteen dimensions. It also shows the highest and lowest values for each dimension, the most frequent...
results (mode), the standard deviation and the value of the average degree of innovation of these companies.

Table 2: Points System for the Degree of Innovation in businesses according to dimension in Stage 1

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Degree of Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Deviation</td>
</tr>
<tr>
<td>Offer</td>
<td>2.11</td>
</tr>
<tr>
<td>Platform</td>
<td>3.77</td>
</tr>
<tr>
<td>Brand</td>
<td>2.73</td>
</tr>
<tr>
<td>Clients</td>
<td>2.45</td>
</tr>
<tr>
<td>Solutions</td>
<td>2.05</td>
</tr>
<tr>
<td>Relationship</td>
<td>1.92</td>
</tr>
<tr>
<td>Adding Value</td>
<td>1.49</td>
</tr>
<tr>
<td>Processes</td>
<td>1.43</td>
</tr>
<tr>
<td>Organization</td>
<td>1.65</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>1.68</td>
</tr>
<tr>
<td>Presence</td>
<td>1.57</td>
</tr>
<tr>
<td>Network</td>
<td>1.63</td>
</tr>
<tr>
<td>Innovative Ambience</td>
<td>1.65</td>
</tr>
<tr>
<td>Average Degree of Innovation</td>
<td>2.01</td>
</tr>
</tbody>
</table>

Source: Based on data provided by SEBRAE/SE (2011)

Offer, clients, processes, network and innovative ambience had a minimum value of 1.00 point and a maximum of 4.33; 5.00; 4.20; 5.00; and 3.75 respectively. An analysis of the
standard deviation of offer (0.06), clients (0.06), processes (0.07), network (0.08) and innovative ambience (0.07) shows that the values are low and indicate that these values are close to the average for distribution. Because of the low coefficient of the standard deviation, these five dimensions can be considered homogeneous.

An analysis of the average for offer (2.11), clients (2.45), processes (1.43), network (1.63) and innovative ambience (1.65) by the scale that measures the degree of innovation shows that every dimension had values below 3, indicating that the variables that measure these five dimensions are not very expressive.

In the offer dimension the highest number of companies had a degree of innovation between 1.51 and 2, followed by an interval of 1 and 1.5. Approximately 80% of the businesses scored below 3 in this dimension, indicating that the variables measured in this dimension have little significant for these companies. Only 20% of the companies showed any evidence that they are seeking new markets, launching new products, improving the design of their existing products and using new technologies or materials.

In the clients dimension the highest number of companies had a degree of innovation ranging from 3 to 3.5, followed by an interval of 1 to 1.5. Approximately 61% of the businesses in this dimension scored under 3, indicating that the variables measured in this dimension have little significant for these companies. Approximately 39% of the companies showed evidence that they are identifying the needs of their clients and listening to them.

In the processes dimension the highest number of companies had a degree of innovation ranging between 1 and 1.5, followed by an interval of 1.5 and 2. Around 98% of the businesses scored under 3, indicating that the variables measured in this dimension have little significance.
for these companies. Only 2% of the companies showed that they are improving their innovative processes.

In the networks dimension the highest number of companies had a degree of innovation ranging from 1 to 1.5, followed by an interval of 3 to 3.5. Around 73% of the companies scored under 3 in this dimension, indicating that the variables measured in this dimension have little significance for these companies. Approximately 27% showed evidence that they have a sporadic or systematic dialogue with their clients.

In the innovative ambience dimension the highest number of companies had a degree of innovation ranging from 1 to 1.5, followed by an interval of 1.51 to 2. Around 98% of the companies scored under 3, indicating that the variables measured in this dimension have little significance to these companies. Only 2% of the companies provided any evidence that their internal environment favors innovation.

The platform dimension had good scores, but the other dimensions scored less than 3. These dimensions are the ones with the most problems and should be the first to be analyzed in order to prepare a plan of action for the companies to implement to overcome the barriers of these dimensions. Table 3 shows the detailed data of the company averages in each of the thirteen dimensions by production chain. The data show that the companies in the textile and clothing industry had the highest average degree of innovation (2.1), followed by companies in the health care production chain (2.06), companies in the food production chain (1.99), companies in the wood and furniture production chain (1.97) and, finally, companies in the construction production chain (1.92).
Table 3– Points system for the Average Degree of Innovation of companies by dimension according to the production chain in Stage 1

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Supply Chain</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food</td>
<td>Construction</td>
<td>Wood and Furnitures</td>
<td>Health</td>
<td>Textiles and Clothing</td>
</tr>
<tr>
<td>Offer</td>
<td>2.08</td>
<td>1.93</td>
<td>2.36</td>
<td>2.16</td>
<td>2.25</td>
</tr>
<tr>
<td>Platform</td>
<td>3.84</td>
<td>4.03</td>
<td>3.81</td>
<td>3.40</td>
<td>3.77</td>
</tr>
<tr>
<td>Brand</td>
<td>2.82</td>
<td>2.47</td>
<td>2.75</td>
<td>2.61</td>
<td>3.01</td>
</tr>
<tr>
<td>Clients</td>
<td>2.30</td>
<td>2.38</td>
<td>2.31</td>
<td>2.71</td>
<td>2.53</td>
</tr>
<tr>
<td>Solutions</td>
<td>2.17</td>
<td>1.72</td>
<td>1.60</td>
<td>2.28</td>
<td>2.23</td>
</tr>
<tr>
<td>Relationship</td>
<td>1.71</td>
<td>1.90</td>
<td>1.94</td>
<td>2.05</td>
<td>2.07</td>
</tr>
<tr>
<td>Adding Value</td>
<td>1.54</td>
<td>1.31</td>
<td>1.18</td>
<td>1.55</td>
<td>1.68</td>
</tr>
<tr>
<td>Processes</td>
<td>1.49</td>
<td>1.33</td>
<td>1.48</td>
<td>1.51</td>
<td>1.36</td>
</tr>
<tr>
<td>Organization</td>
<td>1.66</td>
<td>1.59</td>
<td>1.58</td>
<td>1.77</td>
<td>1.65</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>1.69</td>
<td>1.74</td>
<td>1.95</td>
<td>1.56</td>
<td>1.64</td>
</tr>
<tr>
<td>Presence</td>
<td>1.58</td>
<td>1.36</td>
<td>1.54</td>
<td>1.65</td>
<td>1.77</td>
</tr>
<tr>
<td>Network</td>
<td>1.46</td>
<td>1.64</td>
<td>1.51</td>
<td>1.75</td>
<td>1.73</td>
</tr>
<tr>
<td>Innovative Ambience</td>
<td>1.55</td>
<td>1.61</td>
<td>1.63</td>
<td>1.84</td>
<td>1.65</td>
</tr>
<tr>
<td>Average Degree of Innovation</td>
<td>1.99</td>
<td>1.92</td>
<td>1.97</td>
<td>2.06</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: Prepared using data provided by SEBRAE/SE (2011)

Table 3 shows in bold the best scores obtained in each production chain. The platform dimension had the best score in all the production chains. This result makes sense because one of
the variables measured in this dimension is a company’s production line. As the study was conducted with small and micro businesses that use their production system to manufacture more than one product line, this variable had a high score.

When the key dimensions (offer, clients, processes and network) of the model proposed by Sawhney, Wolcott and Arroniz (2006) are analyzed, along with the innovative ambience dimension proposed by Bachmann and Destefani (2008) in each of the production chains, it is striking that all these dimensions had scores of under 3, indicating that the variables that measure these five dimensions are of little significance to the companies.

**Stage 2: Analysis of the Varying Degree of Innovation in Small and Micro Businesses**

The second stage examines the average degree of innovation of the 560 businesses that were included in both stages. In this stage, the companies were already being monitored by the local innovation agents, who had intervened in some companies. Around 62% of the companies in the second stage operate in the trade sector, 25.36% in the industrial sector and 13.04% in the services sector. Most of the companies (78.57%) are located in the state capital, while the other 21.43% are located in the interior of Sergipe State.

As defined in the methodology, the companies participating in the ALI Project were evaluated in the first stage and their degree of innovation was calculated. The average degree of innovation of the 560 companies in the second stage was 2.06. In Stage 2, these companies were monitored by the innovation agents and there was intervention in some companies by the local innovation agents. In this stage, the average degree of innovation of the companies was 2.18, a growth of approximately 5.8% over Stage 1.
Table 4 shows the average points scored by the 560 companies in each of the thirteen dimensions of both stages of the study and the variation in percentages of the scores from one stage to the other.

**Table 4**–Degree of innovation of companies by dimension in the measurements of Stages 1 and 2

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Degree of Innovation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initial Situation(*)</td>
<td>Stage 1</td>
<td>Final situation Stage 2</td>
<td>Variation %</td>
</tr>
<tr>
<td>Offer</td>
<td>2.18</td>
<td></td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Platform</td>
<td>3.78</td>
<td></td>
<td>4.06</td>
<td></td>
</tr>
<tr>
<td>Brand</td>
<td>2.77</td>
<td></td>
<td>2.86</td>
<td></td>
</tr>
<tr>
<td>Clients</td>
<td>2.49</td>
<td></td>
<td>2.54</td>
<td></td>
</tr>
<tr>
<td>Solutions</td>
<td>2.17</td>
<td></td>
<td>2.18</td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>1.99</td>
<td></td>
<td>2.26</td>
<td></td>
</tr>
<tr>
<td>Adding Value</td>
<td>1.52</td>
<td></td>
<td>1.57</td>
<td></td>
</tr>
<tr>
<td>Processes</td>
<td>1.47</td>
<td></td>
<td>1.59</td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>1.71</td>
<td></td>
<td>1.82</td>
<td></td>
</tr>
<tr>
<td>Supply Chain</td>
<td>1.75</td>
<td></td>
<td>1.80</td>
<td></td>
</tr>
<tr>
<td>Presence</td>
<td>1.62</td>
<td></td>
<td>1.68</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>1.62</td>
<td></td>
<td>1.86</td>
<td></td>
</tr>
<tr>
<td>Innovative Ambience</td>
<td>1.69</td>
<td></td>
<td>1.93</td>
<td></td>
</tr>
<tr>
<td>Average Degree of Innovation</td>
<td><strong>2.06</strong></td>
<td></td>
<td><strong>2.18</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the author based on data provided by SEBRAE/SE (2011)
The data show the variation in values of the dimensions between the initial measurements in Stage 1 and the second measurement (Stage 2). They also show that there were advances in all the dimensions. The most progress was made in the network dimension (15.08%) and innovative ambience (14.20%). The least progress was made in the solutions dimension (0.56%) and clients (1.87%). The 15.08% growth in the network dimension is due to actions such as new company websites, which help to publicize products and services to clients. The 14.20% growth in the innovative ambience dimension can be explained by the technological consultancies conducted at the companies to bring them closer to institutes and solution providers and the participation of entrepreneurs in business events and technical visits. The innovation radar in Figure 2 shows the evolving degree of innovation in Stage 2 of the ALI Project.

**Figure 2-** Innovation Radar: Comparison of the Median Degrees of Innovation of businesses in Stages 1 and 2

Source: Based on data provided by SEBRAE/SE (2011)
Although the time between Stage 1 and Stage 2 was short, giving the businesses little
time to implement innovative actions, the textile and clothing and health care sectors had good
results. However, the food production chain had poor results, leading to a lower average degree of innovation. The data show the global results of the companies under study by production chain. The highest level of growth occurred in the textile and clothing chain (12.56%), where the degree of innovation went from 2.07 to 2.33. This was followed by the health care chain, with a growth of 8.13%, wood and furniture, with 7.43%, construction, with 4.50% and finally, the food chain, with 0.48%.

The companies with the highest level of growth in their degree of innovation were also those with the highest percentage of actions, indicating that the actions developed by the ALI Project and implemented at the companies helped to increase the degree of innovation.

Conclusions

The present study aimed to analyze the degree of innovation of small and micro businesses in Sergipe State. To achieve this goal, the theoretical innovation diagnostic was used, based on the model proposed by Sawhney, Wolcott and Arroniz (2006) and complemented by Bachmann and Destefani (2008).

The degree of innovation in small and micro businesses was calculated in two stages. In the first stage, the average degree of innovation in the 1,260 companies was 2.01, and in the second stage, with 560 small and micro businesses, it was 2.10. The highest average degree of innovation in the first stage was that of the textile and clothing chain. This is a business with a natural dynamic, partly due to the need to keep up with fashion, which forces entrepreneurs to establish a stronger relationship with clients and suppliers and continually seek to offer new
products. The results in the first stage of the study show that 96.43% of the companies were considered low innovators and only 3.57% were considered occasional innovators.

In the second stage of the study, 93.1% of the companies were considered low innovators and only 6.9% were considered occasional innovators. However, no company in the first or second stage was classified as a system innovator. This may be due to the economic sectors that they belong to, as none of the sectors under study is technological.

Following the intervention of the ALI Project in the second stage of the study, there was a rise of approximately 5.8% in the average degree of innovation of the companies under study. This is a reflection of some of the benefits that resulted from the actions taken at the companies and, consequently, the monitoring and aid provided by the local innovation agents.

An analysis of the rise in the average degree of innovation in the second stage by production chain showed that the textile and clothing sector had the highest growth (12.56%) due to the number of companies (83.33%) in which the ALI Project had been, providing a total of 478 actions. Although the time between the two stages was short, the textile and clothing and health care chains had good results. However, the food chain had low scores and this brought down the average degree of innovation.

The results of this study show that the companies under study are not systemic innovators. Most of them were classified as low innovators, and only a small number were considered occasional innovators. In the second stage of the study, there was a small rise in the degree of innovation of these companies, due to the actions of the ALI Project which were implemented at the companies. It should be emphasized that the short space of time between the first and second stages for this implementation may have been a factor in the merely modest
growth in the degree of innovation of these companies.

The results and tools used in this study may serve as a basis or even an incentive for further studies on innovation in small and micro businesses. However, it is important to remember that the model has its limitations because its dimensions do not always capture the fundamental aspects of innovation such as risk tolerance and creativity. Finally, it is hoped that this work has made an important contribution to the business world because it enables the participating companies to know the degree of innovation of each company and which dimensions present the most problems which, theoretically, should be the first to be tackled.

New research should be conducted at these companies at a later date to determine how well their innovation is progressing. Another suggestion for continuing this work is to conduct case studies at the companies with the highest scores in their degree of innovation. In this way, it may be possible to determine which factors allowed these companies to be more innovative than others in the same production chains.

It is hoped that these results can help businesses and public managers to shape public policies adapted to the needs of small companies and that these policies will allow them to become more competitive through innovation.
References


Native American advancement from poverty to self-sufficiency:

Can entrepreneurship help lead the way?

Martin S Bressler- Southeastern Oklahoma State University
Kitty Campbell- Southeastern Oklahoma State University
Brett Elliott- Southeastern Oklahoma State University

Abstract

Entrepreneurship and small business ownership can be considered essential to both economic growth and development of new products and services. Indeed, according to the U.S. Small Business Administration, the 27.9 million small businesses accounted for 64 percent of all net new jobs created from 1993 to 2011 and also account for 99.7 of employer firms in the United States. However, despite these impressive numbers, Native American businesses account for the smallest number of firms (approximately 300,000) among those considered minority owned. Developing new entrepreneurial ventures could be the means to reduce poverty among Native Americans and in addition, benefit both national and local economies. Since the early 1980’s various state and federal economic development agencies began a concerted effort to assist minority businesses, though very little research exists with regard to Native American small businesses. This study examines Native American utilization of tribal and external business development programs.
They Might be Older But They Are Not Afraid of the World of Entrepreneurship: Seniors Have Begun To See the Opportunities of Being Their Own Boss

Michael Menefee, University of North Carolina at Pembroke
John E. Spillan, University of North Carolina at Pembroke

Abstract

The Kaufman foundation recently published a statistic that indicated that 565,000 businesses are started each month (Scarborough, 2014). Most of these businesses are the fruit of a well thought out idea, a new invention or an innovation that has come to fruition. The “can do” approach that entrepreneurs have as part of their DNA has spurred many new businesses that are now growing and maturing in to solid businesses. These new businesses contribute to the economic development of villages, towns, states and territories all over the globe. Over the last few years the United States economy has seen many large companies engage in downsizing that required many employees’ jobs to be redesigned, modified, or eliminated. Some of these displaced workers are older workers that fit into the 50+ category. Many in this cohort are baby boomers who have worked for 30-35 years. They now want to move on from their previous employer and pursue other ventures in their lives. This group of workers can be called “Senior Entrepreneurs” because they have ideas, energy, health and resources to develop their own business and essentially have the best of both worlds. So, we have seen a new trend evolve where seniors, age 50 and older, are finding new opportunities and new ways to express themselves through entrepreneurship. So the question is: what is the extent of this phenomenon and how will it affect the entrepreneurial landscape of the United States and for that matter the world.
Spotlight on Entrepreneurship Opportunities for Baby Boomers

Overview

There is a growing trend occurring not only in the U.S. but also worldwide. Some revealing statistics indicate that by the year 2050 there could be 2 billion people over 60 years of age. This includes entrepreneurs in their 70s and 80s. The U.S. Census Bureau indicates that by 2030, twenty percent of the U.S. population will be part of the age group classified as older (Zhang, 2008). With this huge graying of the population major social and economic issues emerge. Some of the older workers have not planned properly for retirement. Others have had solid and steady careers but they have not fulfilled their professional desires or self-actualization needs. As such this demographic phenomena has presented major social and economic concerns for policy makers. In this knowledge economy, one major suggested solution is for seniors to become involved in entrepreneurial ventures. The notion of older entrepreneurs is not new. Even before the great recession, people were entering entrepreneurial ventures. Essentially people are living longer and more entrepreneurial lives (Moeller, 2010). Entrepreneurship is an activity that is helping people from around the world achieve their dreams. Entrepreneurship is a major activity that is a growing part of many people’s lives. From border to border, and coast to coast entrepreneurs have found a venture that is changing their lives, providing a major source of income and allowing them to achieve their dreams of being their own boss. The Kaufman foundation recently published a statistic that indicated that 565,000 businesses are started each month (Scarborough, 2014). Most of these businesses are the fruit of a well thought out idea, a new invention or an innovation that has come to fruition. The “can do” approach that entrepreneurs have as part of their DNA has spurred many new businesses that are now growing
and maturing in to solid businesses. These new businesses contribute to the economic development of villages, towns, states and territories all over the globe.

Over the last few years the United States economy has seen many large companies engage in downsizing that required many employees’ jobs to be redesigned, modified, or eliminated. Some of these displaced workers are older workers that fit into the 50+ category. Many in this cohort are baby boomers who have worked for 30-35 years. They now want to move on from their previous employer and pursue other ventures in their lives. This group of workers can be called “Senior Entrepreneurs” because they have ideas, energy, health and resources to develop their own business and essentially have the best of both worlds. So, we have seen a new trend evolve where seniors, age 50 and older, are finding new opportunities and new ways to express themselves through entrepreneurship. So the question is: what is the extent of this phenomenon and how will it affect the entrepreneurial landscape of the United States and for that matter the world?

The purpose of this paper is to develop a discussion about Senior Entrepreneurship, describe it characteristics and analyze the trends and impacts that it may have on regional, and country economic development.

This paper is organizes as follows: discussion of the demographics of seniors, why seniors start businesses, transitional issues, senior assets, emerging types of businesses for seniors, case studies, conclusions, and recommendations.

The Demographics

The aging workforce and the onset of the baby boomer retirement has been the catalyst for interest among researchers in entrepreneurship. Based on recent statistics 25% of those 65
and older are self-employed. Fifteen percent of the 50-65 age group are also self-employed (Kendall, 2013). About one third of the retirees who retire or change career after 50 chose self-employment (Katz and Green, 2011). This means that 7.4 million people over the age of 50 work for themselves (Small Business Trends, 2013). The numbers for growth in senior businesses is startling with 25 million people over the age of 50 thinking about starting a business, 25% of senior over the age of 50 will start a business in the next five to ten years, and 17% of all baby boomers plan to start a business when they retire (Senior Entrepreneurship Works, 2013 and Perman, 2009). It is well known that the baby boomer cohort is extremely large. Those people born between 1946 and 1964 are now beginning to retire. Many of these baby boomers have been working since the mid 1960’s and this means that they have been in the work force for close to 50 years. This is a great deal of experience and provides them with a wealth of talent to share, apply and exploit. Some of this experience has value that can be used in a variety of business ventures. As such, those older workers who have been the victims of corporate downsizing or just want to retire from their present position are increasingly choosing to become entrepreneurs rather than the rocking chair. They are, at an increasing rate, choosing another career, their own business where they can apply the wealth of knowledge and experience that they have gained over the years. Think about it, self-employment among the 55-64 year olds rose has risen substantially more from 1996 to 2007 than the traditional entrepreneurial activity of those from 20-34 years of age (Strangler, 2009). This number increased about 2 million or about 5% greater than 2008.

Many of these senior entrepreneurs are doing exactly what they did before they retired but now it is their own business, their own schedule, and under their own control. For some it is a survival tactic because they were laid off or did not have sufficient saving to sustain independent
retirement without employment. They need the self-employment to make ends meet. For others entrepreneurship is an alternative to boredom or just a lifestyle change. Either way it can be done the statistics demonstrate that this new career focus is growing at an increasing rate. The seniors are both pushed and pulled to self-employment. A mentioned above they may be pushed by financial and survival reasons or just pulled by a great desire to self-actualize their dreams or just out of boredom of retired life (Teenu Kautonen, 2013). Either way they have a lot to offer and present a formidable resume of capabilities that can easily be implemented in a variety of entrepreneurial ventures.

Why Seniors Start Businesses

Although there are a variety of reasons that seniors start business, there are six that seem to be the most common reasons for entering into business ventures. Using client file data from the Thomas Family Center for Entrepreneurship at the University of North Carolina at Pembroke, these seven major reasons will be explored to help provide some insight into why seniors start businesses.

One reason that seniors start businesses is to increase their income in retirement or have income before retirement, which is the case with many people being laid off before being able to tap into their retirement accounts at age 59 ½ or Social Security at age 62. For those being laid off, starting a business may be a necessity, as they need income for themselves and their families. Many retirees may find that income from retirement and social security cannot maintain their lifestyles. One example of this is one of want. Several senior entrepreneurs want to travel, have nice houses, drive fine cars, maintain social status in the community, pursue charitable giving goals, and live the upscale lifestyle. They often find that the income from
retirement sources like IRA’s, pensions, and social security does not support their spending patterns. The extra money from the business is used to fill in the gap between retirement income sources and retirement spending. The other example of this is one of need. Many seniors start businesses to pay for bills that are not covered by retirement income. These bills can be from medical expenses, nursing home cost for a spouse, having to pay for children that have come home, having to pay for grandchildren abandoned by the seniors’ children, and just needing more money to meet the increasing costs of maintaining a home.

Many seniors simply want something to do in retirement. Going from a work life of 40+ hours a week to zero hour workweek is a difficult transition for some people. They have too much time on their hands and find television watching, reading, and other activities unfulfilling as well as unprofitable. This leads seniors to consider starting businesses. As one senior put it, “I hate sitting on the bench and watching life go by without being a part of it”. The senior entrepreneurs may be on to something good as remaining active may lead to a longer and more fulfilling life.

Another reason why seniors start businesses is that they want to pursue an interest or a hobby. After doing a job or pursuing a career in a particular area, many people want to do something else in retirement. Supporting by retirement income, they now feel like they can take a chance on starting a new business that they want to do. A senior lady who was going through her late mother’s things found her mother’s bucket list. She realized that her mother had not accomplished many of the things on that list. This motivated her to pursue her own bucket list. One of the things on that list was to own a tea shop. She now runs a successful tea shop and is glad she made the decision to do it.
Some seniors start businesses because they have time to change careers. With life expectancies now being in the eighties for men and women, people leaving jobs in their fifties and sixties now have twenty to thirty years left to pursue a second career. Many of these seniors view their second careers as a chance to run their own businesses the way they want and have fun doing it (Personal interview, 2012).

Many seniors see starting their own businesses as a chance to be their own boss. After working for someone else and seeing their mistakes, they strongly believe that they can run a business better. They also like the freedom to make their own decisions and run their businesses in ways that makes them happy. For these seniors running their own business is a lifestyle decision.

Some seniors start businesses wanting to fulfill their dreams, accomplish something in their lives, and leave something behind after they are gone. These seniors have a need for achievement that is fulfilled by starting a business.

Other senior entrepreneurs see a need in their community that needs to be addressed. Those needs can range from for-profit businesses providing goods and services that are not available or have limited availability in the community to non-profit businesses finding social issues that need to be addressed. This goes to show that necessity is not only the mother of invention, but can be the mother of entrepreneurship.

**Transitional Issues**

There is a transition and a cultural adjustment that late career changes present. Many of the Senior Entrepreneurs are use to having someone working for them and not having to pay attention to “All” the details of the business. This may be a major issue that senior entrepreneurs have to address. When they thought that life in later life would be easier, they now have to deal
with many bureaucratic details that are annoying, and frustrating. This circumstance can be a real “turn off” to those who thought self-employment was a solution to their retirement.

Another issue that seniors may encounter is that of self-confidence. If the senior was laid off then this may have shattered his/her confidence regarding his/her value and such ideas could be transferred to an entrepreneurial venture with the notion of “I can’t do this, they did not want me in my previous job so why can I be of value here”.

Some of this can be resolved through counseling while other aspects of it can be resolved through networking with other entrepreneurs having the same challenges.

One danger that seniors need to think about is the issue of their finances. Some who have been laid off may receive a large severance (which could be used for retirement), which they take and invest it in their new entrepreneurial venture. This has to be done cautiously because the risk of loss of the entire severance is significant. Additionally, seniors who commit fixed income funds to a protracted entrepreneurial venture without any indication of return can create serious retirement problems. Putting all of their retirement funds into the venture may leave nothing for the future and hence create serious financial hardships that are difficult to restore or resolve.

Seniors must be prepared psychologically and competently to make the transition. Yes they have a lot to offer but they also have a lot to lose. Being unprepared is a serious problem. Therefore, significant thought must be given to the venture before the decision is made to go ahead and enter the entrepreneurial situation (Katz and Green, 2011). The best strategy for senior entrepreneurs is to start the process gradually. Although no two entrepreneurs are alike, a measured approach ensures that the odds of success are much greater. In most cases those who
stay closer to their experience or expertise do a better job and ear success much easier (Moeller, 2010).

**Senior Assets**

Seniors in the 50+ category come to the entrepreneurial world equipped with a variety of assets. If we were to take an inventory of what they possess we would not be surprised but we would believe that these assets are valuable and should not go to waste. Many of their assets are obvious but some are not so apparent. Listed below are many of the common ones that are desperately needed in any new entrepreneurial venture:

- Seniors, for the most part, have patience, they are not in a hurry to please others, and do not need to make a name for themselves. The patience is important because entrepreneurial ventures are high-risk journeys and need people who are not easily frustrated.

- Seniors generally have lots of experience. They have life skills that are absolutely critical for success in any business. Those who are 50+ have had at least 20 years of work in the real world and hence are hopefully able to understand that the real world of work has its ups and downs and has success and failure. Entrepreneurship is right along these lines.

- Seniors by and large have a great work ethic. They know the demands of the work environment, generally are focused on getting the job done and are disciplined in the demands of the world of work.
- Most seniors are mature in their point of view and have pretty good judgment about risky decisions that confront them. Maturity is a critical component in any new venture.

- Seniors have the time. They are flexible with their schedules. Those who have retired usually have lots of time on their hands. This gives them the opportunity to think about entering a new venture.

- Many seniors because of their long business involvement have developed large networks of potential customers. This is essential for the initial years and potential growth of a new business.

- Many seniors have financial resources with limited debt as they may have paid off the mortgage on their homes, put children through college, own their cars, and have income from social security and various retirement programs (Small Business Trends, 2013).

While there is a great need for seniors in these categories, there is also a concern that some of the people who enter into these business development areas may succeed and fail in similar fashion as do the general population. The vital statistics of 70% surviving up to 2 years, 50% achieving 5 years of existence, while 33% make it 10 years are real and apply among this cohort of entrepreneurs also. There are some cases where twenty-five percent of the population achieves 15 years of operation. All in all, the profile of success and failure is approximately the same as with the general population (Van de Ven, 2012).

While the aforementioned list of assets or attributes are not exhaustive, it provides a good sense of the power they possess in pursuit of a new business venture. All of these attributes are critical and can be the foundation for a successful entrepreneurial venture.
Emerging Types of Businesses for 50+ Entrepreneurs

There are no unique business ventures that fit only the 50+ age group. There are some businesses that appear to more attract to senior entrepreneurs because of their growth potential. Some examples of these emerging businesses for 50+ age group are as follow:

- Message service – this can be done from their home and requires limited physical work experience. It does require time, flexibility but also a proper etiquette for making sure the proper protocols are used in receiving and communicating the message accurately.

- Grocery shopping – This is a daily routine that most seniors are already doing. It would require a better schedule or itinerary to structure a business that focused on this business but it has great potential due to its simplicity, low dollar investment and easiness.

- Errand service – many seniors are very energetic about interacting with other people and organizations in the community. This seems like a business venture that would fit right in with their time availability, their flexibility and the network of people that they have cultivated over the years.

- Household management service – again an idea that seems to have many of the elements that are aligned with the assets the seniors possess. Much of the work could be done from home and could apply the management experience the seniors have acquired over their time in the work force.

- Senior transportation - The need being met here is helping seniors who are no longer able to drive to get to where they want to be and getting them there with style.

According to Entrepreneur Media (2013) losing the ability to drive can be
devastating, entrepreneurs who find ways to make the ride enjoyable will cash in. This is especially true in areas with limited public transportation options or in situations where the seniors can no longer ride or have the desire to ride in public transportation. Senior transportation has multiple uses including getting seniors to friends and family, church, community events, movies, plays, concerts, club meetings, recreation, doctors’ offices, hospitals, and shopping. Being wheelchair accessible can enhance senior transportation.

- Adult day care—Many seniors live with their children and should not be left at home alone. As these children go to work or just want some time away from the parent, the need arises for them to have a place to go. The idea behind the senior day care is very similar to child day care in that the child can drop off the senior at a facility and know that they will receive good treatment. The seniors have a facility where they can play games, read, relax, and enjoy building relationships with other seniors. The facility can carry out the instructions of the family in terms of medications and proper care.

- Technical training and service—More and more seniors are using computers to get news, play games, email, and socialize with friends on the Internet. Many of these seniors are not technological savvy and need assistance in operating and maintaining computer equipment. This has created a market for technologically oriented entrepreneurs who enjoy working with seniors to meet their training and service needs.

- On-line dating—According to Entrepreneur Media (2013) Tech-savvy seniors are not stopping at email, but are seeking everything from companionship to relationships. Some seniors are lonely and want to use on-line service to find friends. This has led
to sites like SeniorFriendFinder.com that has 600,000 plus members. The friends enjoy the companionship and this helps them to feel less lonely. Other seniors want to go beyond friendship to establishing relationships. Seniors seeking relationships are going on-line to search for love. It should also be noted that traditional match making services also have potential as seniors look for loving relationships. It should be noted that men have a distinct advantage in the senior dating arena, as a vast majority of those seeking relationships are women.

- Health Care-As people get older and live longer they will have an increasing need for health care. The traditional health care system will be used, but there is a rise in the need for home health care. As many seniors prefer to stay in their houses, there will be an increasing need for health care professionals to come to their houses. These home health care providers can provide everything from medical daycare to visits to monitor the patients’ health, provide physical therapy, and administer medication.

- Security-As people get older they often time feel the need for more security in their homes. The most obvious need as heavily advertised on television, newspapers, radio, and other media is getting medical attention when people live alone. Many companies are marketing systems where a button is pushed and the person is in touch with a person that can help them in an emergency situation. Many people also want the fire department notified when a fire breaks out in the house and the police notified when someone breaks into the house. The latter is of much concern to seniors who may be less able to defend themselves against an attacker. As the number of elderly increases with baby boomers living longer, this market has excellent growth potential.
- Physical fitness-As people get older they want to try to maintain or to improve their physical condition to remain healthy and active. Many gyms cater to the young fitness buffs and neglect older people. Going to these facilities may be less than desirable for people with aging bodies. The programs for younger people may not be appropriate for seniors as they put too much strain on older bodies. Programs designed for the needs of seniors provide a safe and comfortable way to maintain fitness into later life. Physical fitness programs and facilities offer a good growth potential as the aging population seeks to stay healthy.

- Senior Living Facilities-As people grow older that may not want to maintain a house. The cost and bother of fixing things coupled with the routine chores of mowing the lawn, trimming the scrubs, shoveling snow, raking leaves, and keeping up a house can become too much for seniors to manage. Many people are exploring the option of selling their houses and moving to managed property where everything is maintained for them. Various senior living options are becoming available from houses to apartments to condominiums to townhouses. As people seek more convenience and freedom in their later years, this business segment should continue to grow.

These are a just few ideas for new business ventures. They already exist in our society but can be replicated and introduced to local markets where they are not prominent. They all offer great opportunity if a senior has the desire/motivation, and energy to get involved in these areas of interest.
Case Studies

Some senior entrepreneurs are more ambitious than others. Some are more creative and capable than others. Nevertheless, almost all have developed niches that have not only satisfied their curiosity and dreams but have also provided additional income that they really need. In this section, we present seven examples of real people who have found fulfillment and self-actualization in areas that they had expertise but never were involved in entrepreneurial ventures. These case studies will stem from the why seniors start businesses section of the paper and will show each reason cited has lead to a senior business.

Example 1 (Need for income): – A corporate designer is the victim of downsizing because of the 2009 recession. This unwanted retirement forced her to think about her future. Since she was in the 50+ category she believed that there was still time to continue her design work in another venue. She played the job search game for some time but found it not meeting her needs. Since she had a hobby in the same field (design, and art design) she decided her hobby could be converted into a business that would provide her with enjoyment, income and financial stability. Her decision to produce sweaters from home materialized and she was able to sell them to a nationally recognized marketer. The venture has been a whopping success. Her business is conducted from home and as such it is low cost, low overhead operation. She has been able to acquire low cost equipment that could be easily installed in her homework environment. This is a real example of how a senior entrepreneur turned an employment challenge into a successful business venture (Celebrating Successful Senior Entrepreneurs, 2013).

Example 2 (Wanting something to do):– A senior executive also in the 50 + category takes 30 years of supply chain management and strategic sourcing experience and applies it to a new
environmental business venture. Since he had worked in many projects he decided he wanted to develop his own business. With his experience with environmental incubators, this former executive believed he could expand his horizons and build a business that focused on recycling garbage. As such, he partnered with another individual who had lots of experience in the environmental field and they developed a company that took consumer waste paper and processed it into compostable products. Again here is an example of a 50+ senior executive transferring 30 years of expertise into a viable business that not only gave him something to do, but also helped him financially and in fulfilling his self-actualization needs and the needs of his community (Celebrating Successful Senior Entrepreneurs, 2013).

**Example 3 (Wanting to pursue an interest):** One man turned his coin-collceting hobby into a successful coin shop after he had been laid off by his company at fifty-five years old with over thirty years of service. His comment was typical of senior making this transition, “The company did me wrong and if I had known how much fun running my own business would be, I would have left them years ago”. He is not only happier, but he also makes more money than he did working for his old company. Today, he has the largest coin shop in his town.

**Example 4 (Time to change careers):** Two women who had high profile careers in business age 63 and 70 respectively, believed that they were not ready for retirement. They had lots of skills, experience, and full of like that they wanted to continue to put to good use. They wanted something that was challenging and fulfilling. They came up with a unique idea of creating community-based programs that promoted networking, risk taking support and assistance to women 50+. They wanted to redirect their skills to the next phase of their life by helping these women achieve their life-long goals. They are now assisting women across the country with
transition decisions and connecting them with new opportunities (Celebrating Successful Senior Entrepreneurs, 2013).

Another example of the desire for self-fulfillment and pursuing a second career till the end using skills and experience gained from lifelong professional work.

**Example 5 (Desire to be one’s own boss):** A woman who had worked for an investment firm for more than twenty-five years and had not been happy with some of the things she was asked to do as well as some of the practices of the firm. Feeling that she could do better being her own boss, she quit her job and started a training program with a rival financial service that had independent offices where people could run their own operations within the guidelines of the parent company. Thinking that the guidelines would give her more freedom to serve her clients the way she wanted to serve them, she opened her investment office. She was surprised to see many of her former clients coming to her firm as well as getting new clients from the community. She runs a successful investment office today and has three employees (Celebrating Successful Senior Entrepreneurs, 2013).

**Example 6 (Need for achievement):** One man felt unfulfilled even though he had a successful career working for an insurance company. By community standards, he was living a good life and had plenty of money for his retirement. He felt like that he wanted to do something to help his community. He looked around and found that the local high school had a high dropout rate. He invested his time and money to create an after-school program to help students succeed in school by providing tutoring and study skills. The results were amazing as students in the program raised their grades as much as two and three letters, decreased their absenteeism, and stayed in school. The community has labeled the program a success and others have joined in
the program either by volunteering their time and/or giving their money. The end result is that the man has a sense of achievement because he has helped others succeed.

**Example 7 (Seeing a need):** Our final example focuses on a 62-year-old retired janitor who takes a totally different direction than what her professional career involved. This individual created an organization that helped people with foreclosure problems. Understanding that the 2009 financial collapse created a multitude of problems for homeowners with no readily available remedies except going back to an unwelcoming bank, this senior entrepreneur’s organization assisted hundreds of clients with foreclosure problems and turned around some major problems associated with foreclosure issues. This senior entrepreneur testified in front of the U.S. Congress and became a strong advocate for people with foreclosure problems. What a story of how a total change in direction turned out beneficially for both the senior entrepreneur and the community as a whole (Celebrating Successful Senior Entrepreneurs, 2013).

It should be noted that these entrepreneurs were in many cases motivated by more than one reason. It also should be noted that they were successful in accomplishing more than one goal in their pursuit of entrepreneurship.

**The Mechanics Necessities of Senior Entrepreneurship**

As in all business development the senior entrepreneurs have to abide by the regulatory bodies rules. Applying for a “Doing Business As” certificate with the state or legal jurisdiction is always part of the business set up procedure. Depending on the type of business it may be necessary to obtain a license i.e. barber shop, restaurant or plumbing business. Obtaining a tax ID is imperative and cannot be ignored in the business building process. While these details may seem routine and mechanical, they can be major obstacles if the entrepreneurs are not alert and
do not pay attention to fine points of business operation. They are not difficult to engage or implement but they do take time and it is necessary that the entrepreneur build their existence into the planning process.

Conclusions

It is a known fact that soon there will be a major workforce shortage in the U.S. economy. Policy makers and business people have been exploring solutions to this dilemma. While the application of information technology and the inclusion of more immigrants can solve some of the problems in this area, senior entrepreneurship is one solution that is readily available and is economically beneficially to the senior and to society as a whole. Many people 50+ are energetic, healthy and capable of working beyond the generally retirement age. The aim of this paper is to outline and discuss senior entrepreneurship as a fast growing segment of entrepreneurship. We have presented the general demographics, the assets that senior entrepreneurs possess, what the transition factors are and some testimonials. Everyone in the field agrees that this segment of the population has great potential for not only advancing the idea of entrepreneurship but also opportunities for more and broader economic development exist with the entry of seniors into the entrepreneurial activity.

The idea that entrepreneurship is only available to the young people has become jaded. The age barrier has been significantly eroded and the notion of senior entrepreneurship provides unique opportunities both socially and economically:

- **Socially** – in that it provides new professional paths for seniors and helps them with their “life satisfaction” issues.
Economically – it helps society because it can reduce the amount of entitlement expenditures that have to be made from a macroeconomic point of view. It also can be individually beneficial to the seniors since many of them have limited financial stability in their senior years.

Seniors can make a major contribution to society. As the days go by it becomes more and more evident that in this knowledge economy they are an underutilized asset that can make a major contribution to the field of entrepreneurship.

**Recommendations for Action**

There is a need to support and encourage seniors to pursue the entrepreneurship efforts (Henderson-Townsend and Mackey, 2013). Although, senior have several assets noted earlier to start a business, many of them do not possess management skills and do not know how to start and run a business. Resources for helping seniors start business have to be made available. This raises two very important issues. One is getting seniors to use available resources in their area and the second is getting entrepreneurial resources to areas in which there is no or limited help for seniors starting businesses.

In areas where help is available to seniors starting businesses, this information needs to be gotten to these seniors. AARP is working hard on educating its membership on the resources available as well as distributing information on starting businesses through their volunteers, their publications, and workshops. The Small Business Administration (Beasley, 2012) is also actively engaged in educating seniors through programs like SCORE. SCORE offers several programs including mentoring, local workshops, on-line workshops, templates and tools, and an on-line community. States also have gotten involved with programs like the North Carolina
Small Business and Technology Development Center (SBTDC). These programs also provide training, counseling, and workshops. Some states like North Carolina are encouraging schools to offer entrepreneurship programs for students. The idea here is fairly straightforward to encourage students to stay in the state and start local businesses. This is a good idea, but it fails to address the idea of supporting senior businesses.

In areas where resources do not exist or where there are limited resources, efforts have to focus on getting help for senior in these areas. Although there are usually many resources available to senior entrepreneurs in urban areas, this may not be the case in rural areas.
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Smokers, Cross-Dressers and Criminals, Oh My!
Comparing Attitudes of Business Majors and Non-Majors Regarding Lifestyle Discrimination Issues

Tracy Cole, Arkansas Tech University
Stephen Jones, Arkansas Tech University

Abstract

Federal law prohibits employers from discriminating against employees on the basis of “protected characteristics,” including race, religion, sex, national origin, disability, and age. While some states have passed state statutes limiting discrimination based on characteristics, such as sexual orientation, credit history, appearance, criminal history, smoking, or drinking alcohol, discrimination based on these behaviors or traits – often referred to as “lifestyle discrimination” – is still legal in most jurisdictions. While employees often object to business policies that intrude on their private lives, employers still screen out employees who seem incompatible with their companies’ interests. Because business majors are learning to become successful business owners, this study examines students’ attitudes regarding lifestyle discrimination. Business majors and non-majors held similar views on most issues, and both groups generally found lifestyle discrimination offensive. These results suggest that while business students are future employers, they may not yet be thinking of employment from an employer’s perspective. Additionally, these future employees may find it difficult to acquire positions at smaller firms whose owners and managers are typically more conservative in their personal and professional values.
An Examination of the Barriers that Impact the Implementation of Environmental Sustainability Practices in Small Businesses

Dr. Thaddeus McEwen, North Carolina A&T State University

Abstract

Environmental sustainability is the business issue of the 21st century and all businesses, large or small, must embrace the green agenda and accept responsibility to reduce their environmental impact. Nature has provided us with very valuable resources that we are accountable for, and it is only by protecting these resources that we improve our lives and those of future generations. From the literature, we know that small businesses are very slow in adopting environmentally sustainable practices (Masurel, 2006). While they are a significant contributor to pollution globally, only a few of them actively engage in actions to reduce their environmental impact.

This paper focuses on the barriers that prevent small businesses from implementing environmentally sustainable practices. It discusses the importance of small businesses and their environmental impact on the economy. Next, it gives the theoretical rationale, a thorough discussion of the barriers that affect adoption of environmentally sustainable practices in small businesses, and ends with suggested resources.

Introduction

With the increased environmental awareness and the growing demand for environmental products and services, there is an upsurge of interest in environmental sustainability (popularly known as “going green”) among corporate managers and entrepreneurs (Schmitter, 2012). Several businesses have implemented a variety of sustainable practices, such as recycling, water conservation and energy-efficient management systems (Herren and Hadley, 2010). Colleges
and Universities have started sustainability programs or are infusing sustainability into their programs and business organization sand are lobbying for support for small businesses to help them adopt green initiatives (Crals and Vereeck, n.d., and OECD, 2012). The United States government has launched several green initiatives, and through the Environmental Protection Agency and the Department of the Interior has created and distributed various publications to help businesses implement environmentally sustainable practices (United States Environmental Protection Agency, 2009).

Despite these efforts, small businesses are still lagging behind the large companies which are increasingly integrating environmentally sustainable practices into their operations (Revell, Stokes and Chen, 2009). According to Revell and Rutherford (2003), there seems to be a lack of commitment by small business owner/managers to reduce their negative environmental impact. Hillary (2000) also characterized them as resistant to voluntary action to reduce their environmental impacts, oblivious about the importance of sustainability, difficult to engage on topics relating to reducing their environmental impact, skeptical about the business benefits of sustainability, and cynical about the benefits of the assessment tools designed to improve environmental performance.

Because of the importance of small businesses to the economy and the benefits of environmental sustainability to businesses and the environment, small businesses must play a critical role in resolving environmental problems. However, the small businesses that seek to implement sustainable practices face a number of barriers, which either do not exist for the large businesses or is very insignificant and therefore not a problem for them. Over the years significant efforts have been focused on the sustainability practices in large organizations, but little attention has been given to the challenges specific to small businesses (Herrin and Hadley,
The purpose of this paper is to discuss the importance of small businesses and their environmental impact on the economy, explain the rationale and benefits for small businesses implementing environmentally sustainable practices, discuss the barriers that prevent small businesses from adopting green initiatives and to offer possible strategies and to increase adoption of environmentally sustainability in small businesses.

Definition of Small businesses

According to the United States Small Business Administration (2012), a small business is independently owned and operated and has fewer than 500 employees. There are approximately 28 million small businesses in the United States and they represent 99.7 percent of all employer firms. Small businesses create the most net new jobs in the economy (64 percent), employ almost half of the private sector workforce (49.2 percent), and contribute about 40 percent of the Gross Domestic Product (GDP). Small businesses share several characteristics that make them different from large companies and also affect the nature and extent of their environmental behavior (United States Small Business Administration, 2012). Small businesses are characterized by a small number of employees, their ownership and management are concentrated in the same hands, they are risk averse, and they usually rely on the opinion of other professionals, such as their supplier, accountant, banker, and attorney. (OECD, 2012).

Small Business Environmental Impact

Individually, small businesses have a relatively small or low environmental footprint, however, as a group, their collective impact can exceed that of a large corporation (McKeiver and Gadenne, 2005; OECD, 2012). The Marshall Report estimates that small and medium size enterprises in the United Kingdom are responsible for 60 percent of the carbon dioxide emissions, while the Environment Agency (2003) and Miller, (2011) estimate that they are
responsible for 60 per cent of commercial waste and about 80 percent of pollution accidents. (Hillary, 2003; Stokes and Rutherford, 2000; and Seidel, 2009). Collectively they contribute about 70 percent of all pollution globally (Revell, Stokes and Chen, 2009). The key sectors where small businesses have a significant environmental impact are livestock farming, construction, waste treatment, metal finishing, food and drink industry, textile and leather manufacturing (OECD, 2012). In the United States, small businesses are also a significant contributor to pollution, e.g., water pollution, air pollution, and the release of toxic chemicals (OECD, 2002). The businesses with the most potential to pollute are involved in the manufacturing and building materials industries (OECD, 2002).

Theoretical Rationale

The overarching concept that provides the rationale for implementing environmentally sustainable practices in small businesses is sustainable development. According to the United Nations World Commission on Environment and Development (Brundt and Commission (1987), sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (p.1). The essence of sustainability is interdependence between economic growth and environmental protection and ensuring that both issues are protected in a long term “win-win situation, rather than competing with each other (Schaper, 2002). In applying the definition to the business field, Savitz and Weber’s (2006) explained a sustainable business as one that creates profit for its shareholders while protecting the environment and improving the lives of those with whom it interacts. The concept therefore does not relate only to the economic aspects or the firm’s profit, but incorporates the triple bottom line principle, i. e., profit or financial viability, which relates to the financial results of the business; people or social fairness, which is about the behavior relating to
social and ethical issues; and planet or environmental responsibility, which relates to taking care of the environment (Schaper, 2002). This definition means that firms engaged in sustainability need to seek strategies that simultaneously create economic value and integrate concerns for the human communities in which they operate, and the ecosystems they impact (Loucks, Martens and Cho, 2010).

Environmental sustainability is the business issue of the 21st century and all businesses, large and small must embrace this value and accept responsibility to reduce their environmental impact. “There is an understanding that nature provides us with valuable resources and services that must be accounted for and that it is only by protecting these resources and services that we improve our own livelihoods and those of future generations” (United States Environmental Protection Agency, 2009). Porter and Kramer (2006) note that “successful corporations need a healthy society [. . .] a healthy society creates expanding demand for business, as more human needs are met and aspirations grow” (p. 83).

Apart from the moral responsibility rationale, small businesses are adopting environmental practices because they also benefit the business. Welford and Gouldson (1993) and O’Laire and Welford (1996) pointed out that the implementation of sustainable practices in a small business could bring significant benefits, such as improved competitiveness, product quality, materials efficiency and staff commitment, along with positive pressure group and community relations, lower insurance premiums, cheaper finance and improve media coverage. Similarly, the World Business Council on Sustainability Development (cited in Stranberg, 2009), stated that businesses can benefit from implementing environmental sustainable practices in two ways (1) by driving costs efficiencies, e.g., improved operational performance and efficiencies; minimizing business risk and improving safety; improving recruitment and retention of talented
employees, increasing income through improved employee morale and productivity, and (2) by generating top line growth through new markets, new products learning through innovation, improved customer loyalty, enhanced recognition and reputation (p. 4-10).

Other benefits for small businesses adopting environmentally friendly business practices were also emphasized by the United States Environmental Protection Agency (2012). They suggested that being green can save money from reduced waste and increased efficiency; bring peace of mind from reduced concerns about health and safety liability; improve public relations; improve employee pride and morale; attract green consumers; attract motivated employees; differentiate business from competitors; provide flexibility in uncertain times; minimize risk, financial and otherwise, from the impacts of climate change; and demonstrate leadership and commitment (p. 1).

The rationale for implementing environmentally friendly practices in small business is the benefits to the environment and the business. Small firms are realizing that business success today means not just a healthy bottom line, but a healthy triple bottom line that takes financial, social, and environmental performance into consideration. Environmental sustainability is an opportunity for small businesses to demonstrate their responsibility to help their community and to make a positive contribution to the world (Environmental Protection Agency, 2012, p. 1).

**Barriers to the Implementation of Sustainability Practices**

It is clear that there are many benefits to implementing environmentally sustainable practices in small businesses, but studies show that in reality many small businesses are still not adopting and implementing green practices because of the many barriers that they face. While the benefits mentioned above have the potential to encourage environmental action studies show that in reality small businesses are facing a variety of barriers that are preventing them
from implementing environmental practices. The section presents the seven most common barriers from the literature:

1. **Perception that Small Businesses have little Impact on the Environment**

   **Negligible environmental impact.** Small businesses do not consider environmental issues or the need to adopt environmentally friendly business practices as a significant issue for their businesses (Condon, 2004; Revell and Blackburn 2004; Studer, Welford and Hills, 2005). Many small business owners either perceive that their businesses have no impact on the environment or that the impact is very small and therefore insignificant (McKeiver and Gadenne, 2005; Tillery, 1999). According to Seidel (2009), 88 percent of SMEs in the UK thought that their activities did not negatively impact the environment. In 2005, only seven percent of the businesses in UK thought that they performed activities that could cause harm to the environment.

   Brown (2006) believes that some managers still operate with old-school thinking and do not truly recognize or appreciate the importance of the reciprocal relationship between environment and the business. They often see environmental practices as a burden, when in fact it should be an integral part of the mission and strategic decisions of the business.

   **Low environmental awareness.** Small business owners’/managers’ perception that they have a low environmental impact may be partially explained by their low awareness and understanding of the environmental impact and risks associated with business operation (Young, 2010 and Borga, Citterio, Noci, and Pizzurno, 2009). Some are not aware of the various environmental and sustainability issues or of the specific environmentally-friendly business practices that they can implement (Walker, Redmond, Sheridan, Wang, and Goeft, 2008) and are afraid of doing things wrong. They lack an understanding of both environmental problems and risks and of the
potential benefits of environmental improvements (Revell and Rutherfoord, 2003). Many think their business performance has negligible impact on the environment (Merrit, 1998). In addition, Anglada (2000) found that there is a belief among some owners/managers that it is the government’s responsibility to solve the environmental problems. Generally small businesses regard the environment as a very low priority or even excluded it from their consideration. The negative attitude and low awareness towards the environment have discouraged many small businesses from implementing an environmental management system or other environmentally sustainable business practices (Revell, Stokes and Chen, 2009).

2. Lack of Financial Resources

Pursuing survival strategy. Lack of financial resources is the single biggest reason why small businesses do not engage in environmental management (Taylor, Baker, and Simpson, 2003; Revell and Blackburn, 2007; and Revell, Stokes and Chen, 2009). Since most small businesses are pursuing a survival business strategy, they suffer from financial problems such as late payment of bills and lack of access to loan financing, they find it difficult to adapt to the changing markets and they lack the capability to attract new financial resources. As a result, the adoption or the installation of pollution reduction technologies seems to be too costly for a small business (n.d., p. 264).

Possible lower profit because of high upfront costs. According to Williams, Hooydonk, Dingle, and Annandale (2000), 82% of the firms surveyed did not have the financial resources or access to financing to undertake environmental improvements. Palmer (2000) found that five out of seven companies studied mentioned finance limitation as a barrier to adoption. Businesses both large and small are driven by profit, so anything that would reduce the bottom line would be a major problem for them. Given this outlook, implementing environmentally sustainable
practices is perceived as an additional cost that will lower the firm’s potential profit. The upfront costs to make the necessary adjustments to create the environmentally friendly products or services and to implement other environmentally sustainable practices will be too high for some businesses. For example, the cost to install solar panels, purchase wind turbines or make other renovations might be more than some small businesses are willing to spend. The United States Department of Energy estimates that a business could spend as much as $95,000 to install a solar electricity system. Because of the cost, some business owners will postpone making their building energy-efficient until there is more cash flow (Williams, n.d.).

**Employee training cost.** Another cost is training employees to implement environmentally sustainable practices, for example, replacing materials and energy use with others that are less damaging to the ecosystem (Rao, Castillo, Intal, and Sajid, 2009). A survey of Australian SMEs confirmed that SMEs consider environmental issues as a potential cost. Similarly, studies by (Germas & Hutchins, 2000) and Anglada (2000) also found that many SMEs considered environmental issues as an additional cost which is an extra burden to the business and an extra obstacle to their competitiveness. They consider it a cost that cannot be passed on to the customer, and that the advantages are very small compared to the cost for implementation (Walker, Redmond, Sheridan, and Wang (2008). Generally, small businesses have very low profit margins and environmental practices could increase their cost and consequently lower their profit margin. Small businesses therefore are reluctant to implement sustainability practices (Prabawani, 2013, p. 46).

**Uncertain return on investment.** Also, there is little clear evidence that there will be a return on investment or if there is a return, whether it will be sufficient to make the time and cost from implementation to results worthwhile.
To design sustainable buildings and implement energy efficient systems, is a huge upfront investment for a small business. Many don’t see a substantial return on the investment to justify the initial expense. When small business owners cannot see or realize the advantages of implementing environmentally sustainable practices, they become skeptical, and it may well affect whether they will be inclined to adopt green business practices. (Williams, n.d. and Revell and Blackburn, 2007).

Limited access to financing. Access to financial resources is a major problem for a number of small businesses SMEs. They have difficulty in obtaining loans due to the financial institution’s perception of high associated risk. Also, small businesses often have inadequate financial statements and lack accounting records, business plans and the necessary knowledge to present their business case in a realistic and favorable light to financial institutions. There is need for better information flow among the financial providers, the small businesses and the relevant government agencies (n.d. p. 264).

3. Lack of qualified Human Resources Personnel

Lack of expertise. Lack of trained and qualified human resources is another barrier that requires improvement. Generally the employees of a small business focus mainly on the essential business functions, such as technical, accounting, sales and marketing. They lack the expertise and the confidence to get involved in environmental issues (Walker, Redmond, Sheridan, Wang and Goeft, 2008). According to Roy and Botral (2003), some managers are involved in various aspects of environmental management, but there is very little employee participation. To improve environmental performance, there is need for skills and expertise in environmental aspects of the business operation among the staff at all levels.
According to Borga, Citterio, Noci, and Pizzurno (2009) and Costka, Balzarova, Bamber and Sharp (2004) small businesses engage in fewer sustainability practices than larger firms because most do not have the expertise and resources to develop sustainability guidelines. For small businesses and medium enterprises, sustainability means complicated terms and procedures, and sophisticated and comprehensive scales for measuring, monitoring and reporting detailed data. Unfortunately, small and medium enterprises lack the personnel with the skills to collect the data and to do the reporting (Prabawani, 2013).

Require commitment to constant training. One of the reasons for non-adoption reported by Norman et al. (1997) is that some sustainable practices are highly complex and are very management intensive and require great commitment to constant learning ((Nowak 1991; Souza Filho 1997). Nowak (1991) states that one reason for small farmers and other small businesses not being able to adopt environmentally sustainable practices is their inadequate managerial skills. He explains that the issue is even more critical because the management systems have been designed for average or above average managers, typically in large organizations. The intellectual cost and time involved in adopting environmental innovations is usually greater than conventional innovations because they require a better understanding of the systems. Thus farmers and small business owners may not be attracted to changes that require such intellectual investments (Vanclay and Lawrence 1994).

4. Small Business Characteristics

Diversity. Another barrier is the characteristics of the small businesses. The characteristics that contribute to the problems the small businesses face on their sustainability journey are their diversity, size, management and organizational structure, and day-to-day operations. In terms of their diversity, small businesses are owned and operated by both men and women of all ages and
ethnicity, located in concentrated commercial and residential areas as well as urban and very remote areas, often lack of expertise, formal education and skills, experience insufficient supervision and reciprocal information exchange from relevant parties (Lawrence, Collins, Pavlovich, and Arunachalm, 2006; Borg, Citterio, Noci, Pizzurn, 2009). Because of the scattered distribution of the small businesses, it sometimes difficult to communicate with them and to organize assistance programs to help them implement sustainable practices. These challenges result in small businesses being less inclined to incorporate environmental sustainable practices in their firm operations and strategies (Lewis and Cassells, 2011).

**Management and organizational structure.** Small businesses are also privately owned businesses that are managed by the owner/entrepreneur who control most of the strategic decisions. The beliefs, attitude and education of the owner will influence whether the business implements environmentally sustainable practices. (McDonough, 2008) makes the point that many owners and managers do not understand the value of adopting a green agenda and as such they develop a complacent attitude to environmental practices.

Job descriptions in the typical small business are often not well defined. There is usually significant overlap in responsibilities with some employees taking on a number of different roles and as a result of non-core activities, such as, environmental practices may not get attention.

**Day-to-day activities.** Another characteristic is the focus on day-to-day activities. Because their financial and staff resources tend to be restricted, small businesses often concentrate on short term problem solving and making ends meet as opposed to taking a longer term approach (Siedel, 2011).
5. Competing Strategic Priorities

Many small businesses have other priorities, for example the core business activities, that they consider more important than becoming energy efficient. Especially during economic downturns, things such as going green are put on the back burner while the business focuses on increasing sales and reducing spending. To many businesses, energy-efficient programs are an expense that the business is not sure will provide a return (Williams, n.d., p. 1).

6. Lack of Management Time

Studies by Revell, Stokes, and Chen (2009); Jenkins, (2006) and Revell and Blackburn (2007) all found lack of time (management and employees) as another barrier to small and medium sized enterprises adoption of sustainable practices including cleaner technologies. Hitchens et al 2005 noted that planning, researching and implementing suitable options for environmental projects take time and because small business owners/managers are always very busy running their businesses, they pay little attention to the environmental issues. Schaper (2002) agrees and points out that small business owners/managers who have more available time are more likely to implement environmentally sustainable programs than those who cannot find time for such non-core activities.

7. Lack of Information and Knowledge

*Information on environmental issues.* A fundamental obstacle to improving environmental performance is a lack of knowledge and information concerning environmental issues. Small businesses generally have a perception that the only motivation to improve environmental performance is legislative compliance. Moreover, they tend to believe that their processes have little or no impact on the environment due to their small scaled production. The perception is derived from the fact that they have limited information on the operational losses in their
production processes. This mentality prevents a large number of SMEs from realizing the high hidden costs of inefficiencies in production (n. d, 264).

Several studies have cited lack of information as a common barrier to implementing environmental practices in small and medium enterprises. Tzschentke, Kirk and Lynch (2008) believe that “limited awareness amongst small business owners of their environmental footprint has consistently been identified as a barrier to change” (p. 131). Studies by (Hillary, 1995 and Smith and Kemp, 1998) also found that many small business owners have a limited knowledge of their environmental footprint which in preventing them from implementing environmental practices.

Hillary (2000) maintains that “lack of knowledge in relation to environmental issues and strategies, compounded by a perceived lack of information and support, has widely been identified as a major constraint, particularly in small and medium enterprises, that do not have the necessary expertise to introduce environmental management systems, or the resources to access it” (p. 1). Levy and Dilwali, (2000) also believe that lack of knowledge about effective conservation measures is a key barrier to the implementation of environmental practices.

**Information on environmentally sustainable practices.** Studies with small farmers in Minnesota, North Dakota and Montana by, the Northwest Area Foundation (2004) found that small farmers were concerned about the lack of reliable information on sustainable practices that they could use when deciding on possible implementation. And interestingly, this concern was not substantially reduced even months after the adoption and experience with sustainable practices. If information is not available to the small farmers and also small businesses who are trying to adopt sustainable practices, they may need to generate such information on their own.
However the cost of information generation may be too high for a single small business or small farmer.

Dissemination of Information. There appears to be several barriers related to the generation and spread of information about environmentally sustainable practices. Although the information for this section was obtained from research with small farmers, the findings also relate to small businesses. Gamon, Harrold, and Creswell (1994) explain that low adoption of sustainable agriculture practices is related to the “lack of dissemination of clear and reliable information” (p. 38). Similarly, Nowak (1991) reports that small farmers are usually unwilling to adopt sustainable practices because information from the various sources are often of conflicting and inconsistent.

Young (2003) also found that in the United Kingdom, Spain and Brazil, traditional sources of information have failed to provide clear and reliable information on environmentally sustainable practices. Similarly, in Iowa, Minnesota, North Dakota, and Montana, farmers were found to rely more on learning from other farmers than from traditional sources. The majority of farmers never used traditional sources of information such as Cooperation Extension and Universities. Farmers who considered alternative sources, such as sustainable farmer’s organizations, found them useful sources of information and advice (Northwest Area Foundation 2004). This variation in information sources creates a barrier to adoption of sustainable agriculture practices. Different sources of information provide conflicting or contradictory recommendations that may negatively affect farmer’s decision to adopt. (Vanclay and Lawrence, 1994).

Information on environmental regulations. Low “eco-literacy” and the lack of understanding about laws, environmental management and best practices are barriers to adopting
environmentally sustainable practices (Schaper 2002; Revell and Blackburn, 2007). In many cases, some small businesses also had difficulty interpreting regulations or did not understand how regulations might impact their business (Revell and Blackburn, 2007).

Many small businesses owners do not know about environmental legislation relevant to their businesses (Taylor, Baker and Simpson, 2003). Revell and Blackburn, 2007 found there was inadequate dissemination of information about new and updated regulations by the government. Generally, small business owners lacked the required knowledge to ask the necessary questions. They also have difficulties determining which of the information they found was relevant (Gerstenfeld and Robert, 2000; Fanshawe, 2000). Environmental assistance and supportive activities and information are not centralized. Therefore, business owners find it difficulty assessing environmental information to know whom to trust about compliance and the appropriate response to environmental regulation (Clark, 2000).

Strategies for improving environmental sustainability practices in Small Businesses

Based on a review of the literature of the barriers that prevent small business owners/managers from adopting environmentally sustainable practices, the following strategies are presented to help improve implementation of environmentally sustainable practices the businesses.

1. Improve Access to Financing

There is need to improve access to financing through strengthening financial support with loan guarantees, grants, revolving loan funds, tax credits, etc., developing relationships with the early-stage investment community, and providing information on the various financial incentives, subsidies, tax credits and grants available to encourage investments in environmental technologies. Additionally, every effort must be made provide information to small businesses about the following: EPA Environmental Finance Centers, SBA environmental Grants and
Loans, grants.gov, department of Energy grants and loans, Environmental protection Agency grants, and others.

2. **Facilitate Collaboration Among Small Business Owners**

   Support and assistance from such groups as Non-profits, industry associations, as well as universities and government agencies provide critical information on sustainability issues and technologies to small business. Collaboration between these organizations and the small business as well as collaboration among the small business will business owners implement sustainable practices and will provide access to advice on funding sources, advice on business operations, and identification of potential collaborators.

3. **Encourage Government Procurement of Green Products**

   One of the biggest challenges green businesses face is going from production to distribution, and government can help companies make this transition successfully by procuring green products. Government, at all levels, must play a more important role in terms of purchasing green products and services and in showing other consumers the benefits of purchasing green products.

4. **Promoting Environmental Protection measures**

   Local authorities, business organizations, and nonprofits should all work together to promote environmental protection measures that can improve the competitiveness of the businesses. The focus should be on the “reduce, re-use, and re-cycle” (“3R”) concepts. Promotion can be done through TV commercials, awareness tool-kits at the environmental Protection Department, relevant chambers of commerce and industry groups. In addition to promoting environmental compliance, offer free advice for small businesses that are interested in applying 3R in their businesses while promulgating best practices within the SME community.
Also setup a mechanism to collect comments on sustainable development issues to be used as best practices with other owners.

5. Increase Education and Information Dissemination for Local Businesses

Provide Training for SMEs management and staff, e.g., workshops, site visits, if possible, and webinars to help small businesses develop management skills as well as learn about sustainable business practices and technologies. Another option suggested by (Herren and Hadley, 2010) is to collaborate with local nonprofits, such as Waste Reduction Partners in Durham, North Carolina. Waste Reduction Partners is funded by the United States Department of Energy, North Carolina Division of Pollution Prevention and Environmental Assistance Program and others to help businesses reduce their environmental footprint by providing energy, water, and solid waste audits, and other assistance.

6. Establish a Central Directory of Resources/Website

The directory/website will provide resources to help small businesses obtain information about green products and services, best practices, relevant regulations, green incentives, etc. The site should also provide information about tax credits, as well projected energy savings, cost savings and return on investment estimates for suggested sustainable projects (Herren and Hadley, 2010)

7. Establish a Resource Center

A resource center similar to the Businesses for an Environmentally Sustainable Tomorrow (BEST) website could be used as a model. The City of Portland, Oregon has partnered with BEST, an organization that provides a “one-stop shop” for Portland businesses to help them become more sustainable. BEST provides free audits for businesses and also houses a
listing of online environmental resources at the national level. Resource Center could also sponsor an annual Green Conference and Expo (Herren and Hadley, 2010).

8. Establish an Environmental Mentoring Program (Peer-Peer Network)

Through an environmental mentoring program, small businesses and others in the network might share information and counsel each other. Small business can learn about sustainable business practices and the implementation of these practices. They will share experiences and knowledge and help each other become more knowledgeable about sustainable business practices.

Role of Entrepreneurship Education in Stimulating Ecopreneurship

How can we encourage the implementation of environmentally sustainable business practices?

Entrepreneurship education, with a specific focus on sustainability, energy conservation, and renewable energy is one of the mechanisms that can be used to stimulate sustainability in small businesses as well as produce the future environmental entrepreneurs.

Several universities are incorporating sustainability into their undergraduate and graduate courses. In addition to the courses, there are also programs and multidisciplinary centers at the university level focusing on sustainability, e.g., the Arizona State University’s School of Sustainability, The Cornell’s Center for Global Sustainable Enterprise, and the Florida Gulf Coast University’s Center for Environmental and Sustainability Education, among others. Some examples already exit and we need to build on that foundation to make sustainability a more integral part of all our programs, courses and workshops.
Resources

Resources are available through the Federal government, state and local government, and from private resources. Resources available from the Federal government are through the Environmental Protection Agency (EPA).

Environmental Protection Agency Resources

1. The Small Business Environmental Home Page
   http://www.smallbiz-enviroweb.org/
   Resource funded by EPA Small Business Ombudsman with information on a wide range of environmental topics for small businesses and assistance providers

2. EPA Small Business Compliance and Enforcement
   http://www.epa.gov/compliance/incentives/smallbusiness/
   Resources and links to promote environmental compliance among small businesses

3. Go Green: GSA Environmental Initiatives
   http://www.gsa.gov/portal/content/198257
   U.S. General Services Administration (GSA) website with information on areas such as buying green with GSA and green facilities.

4. Environmentally Preferable Purchasing Database
   http://yosemite1.epa.gov/oppt/eppstand2.nsf/Pages/DisplayAisle.html?Open&Grocery%2FMiscellaneous%20Store&Cleaning%20Supplies%20and%20Equipment&Type=4
   EPA maintains a database on the environmental attributes of over 600 products and services

5. Environmentally Preferable Purchasing Tools
   www.epa.gov/epp/
   EPA’s EPP page has information on general and product-specific purchasing tools, guidance for federal purchasers, information for vendors, and information on finding and evaluating green products.

6. Go Green: GSA Environmental Initiatives
   http://www.gsa.gov/portal/content/198257
   U.S. General Services Administration (GSA) website, with information on areas such as buying green with GSA.

7. SmartWay Transport Partnership
   www.epa.gov/smartway/index.htm
   EPA’s SmartWay brand identifies products and services that reduce transportation-related emissions
8. **WasteWise**
   [www.epa.gov/epawaste/partnerships/wastewise/index.htm](http://www.epa.gov/epawaste/partnerships/wastewise/index.htm)
   EPA’s voluntary municipal solid waste reduction partnership program for businesses, local governments, and non-profit organizations

9. **Pollution Prevention (P2)**
   [www.epa.gov/p2](http://www.epa.gov/p2)
   EPA’s P2 program helps reduce waste at the source; information on pollution prevention strategies such as modifying production processes, conservation, non-toxic chemicals, and re-use.

**Technical Assistance**
US EPA’s Sector Strategies Programs

This program works to enhance the environmental performance of 12 manufacturing and service sectors: agribusiness, cement, colleges and universities, construction, forest products, iron and steel, metal casting, metal finishing, paint and coatings, ports, shipbuilding and ship repair, and specialty batch chemicals. The program aims to improve environmental performance through a knowledge-based approach to problem solving and implementation of systematic management of environmental issues and will produce EMS implementation guidance documents for each of the targeted.

**Compliance Assistance Centers**
[www.assistancecenters.net](http://www.assistancecenters.net)

Created through EPA sponsored partnerships with industry, academic institutions, environmental groups, and other agencies, these centers help businesses, local governments and federal agencies understand Federal environmental requirements and save money through pollution prevention techniques. Through web sites, telephone assistance lines, fax-back systems, e-mail discussion groups and more, the Centers aim to help address real-world issues in language that is used by the regulated entities.
Pollution Prevention Resource Exchange (P2Rx) www.p2rx.org

A consortium of eight regional pollution prevention information centers, funded in part through grants from EPA, represents a broad constituency, including state and local pollution prevention programs, manufacturing extension partnerships, cooperative extension and nonprofit organizations.

US EPA National Environmental Compliance Assistance Clearinghouse (Clearinghouse) http://www.epa.gov/compliance/assistance/clearinghouse.html

This site offers a wide variety of public and private sector environmental compliance information. Visit the Clearinghouse’s collection of links to materials on EMSs at: http://www.epa.gov/compliance/resources/publications/assistance/index.html
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Groupon: Good Deal or Raw Deal for Small Businesses?

Laurie A. Babin, University of Louisiana at Monroe
Eugenie Goodwin, University of Louisiana at Monroe
Melissa Melancon, University of Louisiana at Monroe
Deborah Golemon, University of Louisiana at Monroe

Abstract

This paper is a case that is appropriate for several business courses: small business, general marketing, retailing, marketing communication, and services. The case involves a decision a restaurant owner must make regarding offering a Groupon promotion involving $50 worth of food and drink for $25. Groupon is a daily deal website that requires enough people to accept the deal for it to be on. Groupon’s business model is explained – Groupon receives $12.50 and the restaurant receives $12.50 but gives customers $50 worth of food and drink. Should the restaurant run the deal? What other factors should the owner consider? The teaching note covers the financial analysis of the deal as well as qualitative factors to consider.
Can You Borrow? Factors That Determine Ability To Borrow

Eugenie Goodwin, University of Louisiana Monroe
Arturo Rodriguez, University of Louisiana Monroe

Abstract

The financial crisis of 2008 had a negative impact on credit availability for many commercial borrowers, leading to a credit crunch. Senior lender opinion surveys conducted by the Federal Reserve reflected a sentiment of tightening underwriting standards on all types of commercial loans. Government actions early on helped to increase the dollar volume and number of loans guaranteed under the SBA 7(a) program from 2009 to 2011; however, a trend toward more loans to existing businesses versus startup businesses was evolving and apparent in the data. To explore the ramifications and obtain small business owner data, a survey of small business owners throughout the United States was done in June 2012 and showed the same trend in government guaranteed loans being obtained by existing businesses with fewer guaranteed loans being obtained by startup businesses (businesses less than 12 months of operations).

REFERENCES


Predictors of Entrepreneurial Intention: Influences of Gender Role Orientation

John Palmer, Ph.D., Quincy University
Melissa Griswold, Ph.D., University of Maryville
Pamela Wiewel, Ph.D., Liberty University
Vicky Eidson, Dr. Mgt., Quincy University

Abstract

This study examines factors contributing to entrepreneurial intention (EI) and expands on the Liñán and Chen (2009) EI framework by examining the potential moderating influence of gender role orientation. The Entrepreneurial Intentions Questionnaire as utilized by Liñán and Chen and the Bem (1974) Sex Role Inventory (BSRI) were utilized to assess potential impacts of gender role orientation on variables impacting entrepreneurial intention. The BSRI was used to identify masculinity, femininity and androgyny in 185 college students. Structural equation modeling was then utilized to confirm the validity of the entrepreneurial intentions model and to determine the impact of demographic variables and gender role orientation on Subjective Norm (SN), Perceived Behavior Control (PBC), and Personal Attitude (PA), which were all three statistically significant predictors of EI in the Liñán and Chen study. While the main effects of gender role orientation on EI were non-significant, results indicated that the BSRI Masculinity score was a significant positive predictor of SN, PA, and PBC, but neither the BSRI Femininity nor Androgyny scores were found to be significant predictors of the variables. Implications of findings and recommendations for future research are discussed.

Factors contributing to entrepreneurial intention have been widely studied. Entrepreneurial intention can be defined as an individual’s perceived likelihood that (s)he will become involved in the process of venture creation (Liñán & Chen, 2009). While intention does


not mean the individual will carry out entrepreneurial behavior, intention has been found to predict behavior (Ajzen, 1991).

Previous studies have focused on the role that gender, gender role stereotypes, and gender orientation have played in predicting entrepreneurial intention (e.g., Gupta, Turban, Wasti, & Sikdar, 2005; Gupta, Turban, & Bhave, 2008; Mueller & Dato-On, 2008; Wilson, Kickul, Marlino, Barbosa, & Griffiths, 2009). For example, Gupta, et al, (2005) found that males and females alike perceive entrepreneurs to have predominantly masculine characteristics, yet they found no significant gender based differences in levels of entrepreneurial intention. When respondents were asked to categorize themselves as “seeing oneself similar to” males or females, being similar to a male was related to entrepreneurial intention while being similar to a female was not. Gupta, et al, (2008) further explored the role that activating a gender stereotype had on entrepreneurial intentions. This study found that men generally had higher levels of entrepreneurial intentions except when entrepreneurship was presented in a reading as a gender-neutral career choice.

Mueller and Dato-On (2008) studied entrepreneurial self-efficacy in men and women and found no significant difference between genders. The results led them to analyze whether gender-role orientation played a larger role than actual gender in entrepreneurial self-efficacy. Gender-role orientation is based upon a self-classification as having more “male” descriptive traits, “female” descriptive traits, or “androgynous” descriptive traits. These results led to the breakdown of the venture creation process into four distinct tasks where androgyny was associated with higher self-efficacy in the early stages characterized by the need for creativity and innovation and a masculine orientation was associated with higher levels of self-efficacy in the later tasks related to persuading and leading others.
Wilson et al., (2009) studied entrepreneurial intentions and entrepreneurial self-efficacy in a parallel study where data was collected on middle and high school students, MBA students, and early career adults. For the first two groups of students, gender had a strong effect on both entrepreneurial intentions and self-efficacy, with males scoring higher than females. The effect of gender on intentions was reduced when self-efficacy was considered. When the role of gender on self-efficacy and entrepreneurial behavior was investigated, gender differences were found for self-efficacy but not entrepreneurial behavior. Self-efficacy and entrepreneurial behavior were found to be significantly related. For early career adults, the relationship between entrepreneurial education, gender and entrepreneurial self-efficacy on entrepreneurial behavior was examined. While gender and education when viewed separately did not have a significant effect on entrepreneurial behavior, when viewed together, they did. Additionally, when self-efficacy was factored in, its effects overwhelmed the others. These relationships seem to demonstrate the importance of entrepreneurial education aimed at increasing self-efficacy, especially in women. If education can increase knowledge and therefore confidence in undertaking an entrepreneurial task, self-efficacy will increase leading to an increase in entrepreneurial behavior.

Additionally some studies have shown that national cultural differences did not play a role in the gender differences related to entrepreneurial intention (Liñán & Chen, 2009; Gupta et al., 2005; Gupta, Turban, Wasti, & Sikdar, 2009). These studies found that the pattern of relationships was consistent across the countries studied. In other words, the results of the studies remained consistent regardless of the country in question. This would imply that research findings and resulting educational implications of gender differences could be applicable to various cultures.
Gender (or sex role) orientation relates to associating a person with traits that a traditional social system has deemed to be more “masculine” or more “feminine” (Mueller and Dato-On, 2008). Masculine traits are associated with the idea of “getting the job done.” Some of the traits include assertiveness, independence, dominance, and aggressiveness. Some of the traits associated with a feminine orientation include being affectionate, cheerful, gentle, and sympathetic. Persons exhibiting a mix of masculine and feminine traits are deemed androgynous. Bem (1974) developed an instrument known as the Bem’s Sex Role Inventory (BSRI). Bem’s inventory classified individuals in one of four categories based upon their self-assessment: masculinity, femininity, androgynny and undifferentiated. Individuals rate themselves on a 7-point scale on the degree to which 60 items are characteristically true or untrue about themselves (Gruber & Powers, 1982). Based upon this self-assessment, individuals are classified either as masculine, feminine, androgynous or undifferentiated. Individuals who score high on both the masculine and feminine index are classified as androgynous and those who score low on both are classified as undifferentiated (e.g., Hoffman and Borders, 2008). Gender orientation can vary from biological gender, however, many studies have demonstrated that males tend to have higher masculinity scores and females are more likely to have higher femininity scores (Özkan & Lajunen, 2005). This instrument has been widely used in business research regarding gender orientation (Mueller and Dato-On, 2008).

Past research related to gender orientation and entrepreneurship has related some entrepreneurial activity with traits related to a masculine orientation. For example, Mueller and Dato-On (2008) found that masculinity is associated with higher entrepreneurial self-efficacy. Gupta et al.(2008) found that gender-based stereotypes influenced choices that individuals made about becoming an entrepreneur, with entrepreneurship viewed as being a predominately
masculine activity. Moreover, Cornwall (2011) found that when individuals were asked why they wanted to become entrepreneurs, males tended to select reasons related to independence (a male BSRI trait) and income potential while females tended to pursue entrepreneurial initiatives in order to achieve a greater work-life balance or to pursue an intrinsic interest that could be facilitated through entrepreneurship.

A comprehensive model of entrepreneurial intention was developed and tested by Liñán and Chen (2009). In their framework, variables related to gender, entrepreneurial role models, and employment experience were associated with three other variables which collectively accounted for approximately 55% of the variation in entrepreneurial intent. The three variables were attitude toward becoming an entrepreneur, degree of social support that individuals perceived having if they decided to choose entrepreneurship as a career path, and a variable that the researchers labeled perceived behavioral control, or the degree to which individuals felt confident that they would be successful as an entrepreneur. While males were more likely to exhibit positive attitudes about becoming an entrepreneur and were more confident in their ability to be successful in an entrepreneurial venture, the potential influences of gender role orientation were not assessed.

Given the predictive power of the Liñán and Chen model, as well as past research indicating that gender role orientation may play an important role in determining entrepreneurial intent, the purpose of this study is to extend the Liñán and Chen framework by also including gender role orientation in the analysis.
Methodology

Quantitative data were collected from a sample of 185 college students majoring in business at a private liberal arts Catholic university in the Midwest. The sample included traditional and nontraditional undergraduate and MBA students. The surveys were distributed in business courses and students were not allowed to complete multiple surveys. The survey included the BSRI (Bem Sex Role Inventory) as well as questions that were contained on the Liñán and Chen entrepreneurial intention survey. Additional questions pertaining to demographics, work experience and the number of entrepreneurship classes that individuals had taken were also included in the instrument.

Surveys were analyzed to compute each individual’s masculinity, femininity, and androgyny scores. Additionally, based on survey results, scores were computed for each individual in four categories in a fashion consistent with Liñán, and Chen(2009). The Subjective Norm (SN) is the average of the respondents’ answers to items 66 through 68 on the Survey (See Appendix 1). Perceived Behavioral Control (PBC) is the average of items 69 through 74. Personal Attitude (PA) towards entrepreneurship is an average of items 61 through 65. Finally, a score was calculated for their Entrepreneurial Intention (EI) by averaging items 75 though 80.

The final step was to use Structural Equation Modeling (SEM) to confirm the entrepreneurial intentions model of Liñán, and Chen (2009) and its predictors SN, PBC, and PA. SEM is a confirmatory methodology rather than exploratory. In addition, SEM was taken a step further to determine which demographic variables have a significant impact on SN, PBC, and
PA and whether or not sex role orientation as identified by the BEM inventory has a significant impact on SN, PBC, and PA and entrepreneurial intention.

**Sample Characteristics**

Survey respondents were 117 (63.2%) male and 68 (36.8%) female. Fifty-seven respondents (31.0%) reported being under 20 years of age, 117 (63.6%) were 20 to 30 years of age, and 10 (5.4%) were over 30 year of age. Average GPA was 3.24 on a 4.0 scale. Within this sample, 141 respondents had no self-employment work experience; those who had worked for themselves had spent an average of 3.03 years in that endeavor. When examining total work experience, respondents who reported working full-time had an average of 4.64 years of full-time employment and those with part-time experience averaged 4.51 years experience.

Respondents were also asked about the entrepreneurial experience of those they know. When asked if they personally know an entrepreneur, 150 (81.1%) responded “yes”. In addition, 101 respondents (54.6%) responded “yes” that a member of their immediate family owns a business. Finally, 52 respondents (27.6%) reported taking at least one course in entrepreneurship.

**Results**

As shown in Figure 1, SEM did confirm the original results from Liñán and Chen (2009) showing that Subjective Norm, Perceived Behavioral Control, and Personal Attitude are all statistically significant predictors of Entrepreneurial Intention. Together they provided an Adjusted $R^2$ of 0.6929.
Additionally, several demographic variables were found to be statistically significant when predicting Subjective Norm, Perceived Behavioral Control, and Personal Attitude. Personal Attitude towards entrepreneurship has three statistically significant predictors. First, whether the respondent knows an entrepreneur is positively correlated only to PA. That is, those respondents who personally know an entrepreneur, have a higher (more positive) Personal Attitude toward entrepreneurship. Second, those respondents who have taken at least one course in entrepreneurship, have a higher Personal Attitude as well. Finally, the BSRI Masculinity score had a positive correlation to Personal Attitude showing that the higher the masculinity score, the more favorable the respondent’s attitude is towards entrepreneurship. The Subjective Norm score also has a positive significant effect on Personal Attitude. Together these three variables have an Adjusted $R^2 = 0.1840$. Thus, while they are statistically significant predictors, they do not explain the majority of variance in Personal Attitude.

The next predictor of Entrepreneurial Intention examined was the Subjective Norm which examines the level of approval the respondent feels (s)he would receive from those in their “close environment” should the respondent choose to pursue the entrepreneurial path. Both full-time and part-time employment were significant predictors but with opposite effects. As the time spent in full-time employment increases, the Subjective Norm, or feeling that others would approve of an entrepreneurial venture decreases. However, as the time spent in part-time employment increases, the Subjective Norm increases. Additionally, as with PA, the BSRI Masculinity score increases, the SN increases as well. Together these variables have an Adjusted $R^2 = 0.0904$.

Finally the Perceived Behavioral Control is affected by two of the demographic variables. As with SN and PA, the BSRI Masculinity score had a significant positive correlation to PBC.
Additionally, those respondents who have taken at least one course in entrepreneurship have a significantly higher PBC score than those who have taken no courses. Finally, the Subjective Norm score was found to have a statistically significant positive effect on PBC. Together these three variables have an Adjusted $R^2 = 0.2071$.

These results show that several variables were not found to be statistically significant. While the BSRI Masculinity score was a significant predictor of SN, PA, and PBC, neither the BSRI Femininity nor Androgyny scores were found to be significant predictors of any of the variables. In addition, the demographic variables of gender, age, and GPA were not found to be statistically significant.

Figure 1

Structural Equations Model Predicting Entrepreneurial Intention

Note: Only significant path coefficients included. Numbers below the constructs indicate variance explained.
Discussion

The results of this study suggest that gender role orientation is important in predicting entrepreneurial intentions. Specifically, masculinity was found to be a positive predictor of subjective norm, personal attitude toward entrepreneurship, and perceived behavioral control. Thus, individuals with higher masculinity scores reported receiving more in the way of social support to become entrepreneurs, a more positive attitude toward becoming an entrepreneur, and more confidence in their ability to be successful as an entrepreneur. In turn, all three of these characteristics were positive predictors of entrepreneurial intent.

Surprisingly, androgyny was not a significant predictor of any of the three variables predicting entrepreneurial intent nor was it a significant predictor of entrepreneurial intent itself. This finding runs counter to many past studies indicating that androgyny is positively related to entrepreneurial self-efficacy (e.g., Mueller and Dato-On, 2008) and that androgyny is positively related to effective leadership skills (e.g., Ronit, Ronit, and Boas, 2012; Powell, 1989). Perhaps this result had something to do with characteristics of the sample itself, which consisted primarily of traditionally aged college students. It is possible, for example, that highly androgynous individuals in the sample may have, for whatever reason, been more inclined to want to go to work for large corporations than to go into business for themselves. Relative to more masculine individuals, perhaps these individuals placed more value on social elements of the workplace and felt that those needs could be better fulfilled by being a part of a larger organization than by going into business for themselves. While this is simply speculation and only one possible explanation, future research should examine potential dynamics between these variables in more detail.
Additional research concerning the relationship between first hand exposure to entrepreneurship and entrepreneurial intentions would be of interest. In this study 81.1% of respondents answered “yes” to personally knowing an entrepreneur and 54.6% responded “yes” that a member of their immediate family owns a business. At first glance one might speculate that having exposure to entrepreneurship would increase entrepreneurial intent. One might also speculate that there would be increased social pressure to become an entrepreneur and or to have a higher perception of ease of becoming an entrepreneur if someone knows an entrepreneur or has a family member that owns a business. But this assumes a positive exposure to entrepreneurship. Rather, with the recent economic decline and somewhat negative tax and regulatory environment of recent years, perhaps current entrepreneurs are discouraging college students from pursuing the once “American dream” of owning their own business.

In this study, 27% of respondents had also taken at least one entrepreneurship course. Perhaps not surprisingly, taking an entrepreneurship course was positively related to both personal attitude toward becoming an entrepreneur (PA) and perceived behavioral control (PBC). At first glance, results suggest that entrepreneurship education may increase both PA and PBC. However it is also possible that individuals with higher PA and PBC scores may have been more likely to enroll in entrepreneurship courses to begin with. Of interest would be to examine potential causality between entrepreneurial education and masculine orientation. Are stereotypical masculine traits such as independence, forcefulness, dominance and confidence taught in entrepreneurial courses? Does taking an entrepreneurship course increase student masculinity? Are stereotypical feminine traits such as truthfulness, conscientiousness, expressiveness and concern for others taught to the same degree as stereotypical masculine skills?
Conclusion

The importance of entrepreneurship to the U.S. economy is evident. According to a 2009 Kaufman Foundation report entitled “Where Will the Jobs Come From?” firms less than five years old account for approximately two-thirds of newly created jobs in the U.S. (Stangler and Litan, 2009). Moreover, U.S. Census Data states that in 2007, women owned 7.8 million businesses generating $1.2 trillion in receipts. This number accounted for 28.7 percent of all businesses and about 3.9 percent of business receipts nationwide (United States Census Bureau, 2010). Thus, it would follow that knowledge of entrepreneurial intentions and the potential influences of gender role orientation should help shape education and assistance programs which could then be tailored toward specific purposes that may help to reduce entry barriers for people contemplating starting a new business. In this vein, the current research has sought to further the understanding of entrepreneurial activity by identifying factors contributing to high levels of entrepreneurial intention.
References


Appendix I

Survey Instrument

Rate yourself on each item, on a scale from 1 (never or almost never true) to 7 (almost always true). Please CIRCLE only ONE answer per item and please answer every question.

<table>
<thead>
<tr>
<th>Item</th>
<th>Never or almost never true</th>
<th>Always or almost always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-reliant</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Yielding</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Helpful</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Defends Own Beliefs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Cheerful</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Moody</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Independent</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Shy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. Leadership Ability</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. Sensitive to Other’s Needs</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. Truthful</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Willing to Take Risks</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. Understanding</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. Secretive</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. Makes Decisions Easily</td>
<td>1</td>
<td>2</td>
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<tr>
<td>16. Compassionate</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. Sincere</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18. Self-sufficient</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Never or almost never true</td>
<td>Always or almost always true</td>
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<tr>
<td>19. Eager to Soothe Hurt Feelings</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>20. Conceited</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>21. Conscientious</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>22. Athletic</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>23. Affectionate</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>24. Theatrical</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>25. Assertive</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>26. Flatterable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>27. Happy</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>28. Strong Personality</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>29. Dominant</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>30. Soft Spoken</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>31. Likable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>32. Masculine</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>33. Warm</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>34. Solemn</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>35. Willing to Take a Stand</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>36. Tender</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>37. Friendly</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>38. Aggressive</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>39. Gullible</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>40. Inefficient</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never or almost never true</td>
<td>Always or almost always true</td>
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<tr>
<td>41. Loyal</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>42. Unpredictable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>43. Forceful</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>44. Feminine</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>45. Reliable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>46. Analytical</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>47. Sympathetic</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>48. Jealous</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>49. Act as a Leader</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>50. Childlike</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>51. Adaptable</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>52. Individualistic</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>53. Doesn’t Use Harsh Language</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>54. Unsystematic</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>55. Competitive</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>56. Loves Children</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>57. Tactful</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>58. Ambitious</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>59. Gentle</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>60. Conventional</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

CIRCLE your level of agreement with the following sentences from 1 (total disagreement) to 7 (total agreement).
### Total Disagreement | Total Agreement
---|---
1 | 2 | 3 | 4 | 5 | 6 | 7

61. Being an entrepreneur implies more advantages than disadvantages to me

62. A career as entrepreneur is attractive for me.

63. If I had the opportunity and resources, I’d like to start a firm.

64. Being an entrepreneur would entail great satisfactions for me.

65. Among various options, I would rather be an entrepreneur.

---

**If you decided to create a firm, would people in your close environment approve of that decision?**

| Total Disagreement | Total Agreement |
---|---|
1 | 2 | 3 | 4 | 5 | 6 | 7

66. Your close family

67. Your friends

68. Your colleagues

---

**To what extent do you agree with the following statements regarding your entrepreneurial capacity?**

| Total | Total |
---|---|

257
<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagreement</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>69. To start a firm and keep it working would be easy for me.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>70. I am prepared to start a viable firm.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>71. I can control the creation process of a new firm.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>72. I know the necessary practical details to start a firm.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>73. I know how to develop an entrepreneurial project.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>74. If I tried to start a firm, I would have a high probability of</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>succeeding.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicate your level of agreement with the following statements from 1 (total disagreement) to 7 (total agreement.)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Total Disagreement</th>
<th>Total Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>75. I am ready to do anything to be an entrepreneur.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>76. My professional goal is to become an entrepreneur.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>77. I will make every effort to start and run my own firm.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>78. I am determined to create a firm in the future.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>79. I have very seriously thought of starting a firm.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>80. I have the firm intention to start a firm some day.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>

81. How many years of part time work experience do you have? ______________

82. How many years of full time work experience do you have? ______________

83. How many years of self-employment work experience do you have? ___________
Please circle one:

84. GENDER:

Male  Female

85. AGE:

Less than 20 yrs  20 – 30 yrs old older than 30 yrs

86. Do you know personally an entrepreneur? (circle one) YES  NO

87. Does anyone in your immediate family own a business? (circle one) YES  NO

88. Have you ever taken an entrepreneurship course? (circle one) YES  NO

89. What is your current cumulative GPA? 

________________

90. What is your major? _______________

______________

BEM SEX ROLE INVENTORY  The Bem Sex Role Inventory was developed in 1971 by Dr. Sandra Lipsitz Bem. It characterizes your personality as masculine, feminine, androgynous, or undifferentiated. The BSRI is based on gender stereotypes, so what it’s actually measuring is how well you fit into your traditional sex role. Thus, your score may say as much about how our cultural expectations have changed over the
Integration in Start-Ups: Realizing and Understanding Differences

Nina Krey, Louisiana Tech University
Cedric Mbanga, Louisiana Tech University

Abstract

With the changing of the markets around the world, new challenges pertaining to the management of a diverse workforce are continuously surfacing. This article investigates the existence of a potential disconnect between employees and executives with regard to perceived benefits associated with the integration of employees with an immigration background and the usefulness of specific integration measures. The findings are striking. Not only do executives and employees disagree on the type of benefits, but they also disagree on the most effective methods used to promote integration. This suggests the need to ensure an alignment of executives and employees vision regarding the benefits and techniques of integration prior to developing policies and strategies tailored towards the unity of a diverse workforce. Lastly, the current study overcomes the gap in the literature by providing a new perspective through the incorporation of employee views in the analysis.

Introduction

It is no secret that globalization has significantly altered the nature of competition within markets around the world. These new and dynamic markets provide organizations not only with business opportunities, but also give rise to an array of challenges. One of these difficulties is related to the labor market where the need to attract and retain highly skilled employees inevitably leads to increased diversity within the organizations. In fact, recent studies report a higher level of workforce diversity within US companies due to the hiring of employees with an immigration background (e.g. McCauley, 2005; Pitts, 2009). McCauley (2005) argues that this
trend is likely to continue through the next decades leading to a re-shaping of the overall workforce. While the shift towards divers and heterogeneous work environments has predominately been researched within the US labor market, this development is also evident in other more developed countries, such as Germany and China (Wickramasekara, 2008).

Previous research studies have examined the importance of diversity in relation to the success and growth of new businesses (Bouncken, 2004; Mellewigt and Späth 2002). Winkler and Bouncken (2011) noted that companies relying on a diverse workforce tended to employ more creative and innovative solutions in reaching organizational goals. They continue to argue that these elements are essential for start-ups needing to establish their position within developed markets. In contrast, other studies found that culturally homogeneous organizations display greater stereotypical thinking and misunderstandings among employees, which often affect employee performance and overall organizational productivity (Bouncken, 2004; Süß and Kleiner, 2007). This can ultimately contribute to the organization’s loss of competitive advantage and economic failure. Interestingly, diverse companies that neglect to successfully integrate employees with immigration background face the same negative consequences as culturally homogenous organizations (Raes, Bruch, and de Jong, 2013). As a consequence, it becomes imperative for the success of organizations to put in place effective processes and policies ensuring the proper integration of today’s heterogeneous workforce.

Granted that the term diversity can be defined over several dimensions, such as age, gender, and ethnicity, scholars have attributed the strongest positive influence on an organization to the cultural element of the construct. Being defined as the similarities and differences among cultural groups in a company, cultural diversity can lead to the establishment of intercultural synergies (Koeppel, 2008). These synergies enable organizations to produce higher quality
outputs than possible in a homogenous environment due to the leveraging of advantages, such as intercultural learning and a broader knowledge base. While traditional economic research on diversity has focused on the integration of immigrants and minority groups in host economies through market transactions (Kahanec and Zimmermann, 2009), this study extends the literature by providing further insights into the benefits of a well-integrated and diverse workforce for modern organizations.

Specifically, this article investigates the existence of a potential disconnect between employees and executives with regard to perceived benefits derived from proper integration of immigrant workers. In addition, the most effective measures of integration are identified by both groups enabling a direct comparison of their perceptions. Lastly, the potential indirect effect of language proficiency on the relationship between perceived benefits of integration and employment status (executive or employee) is another focus point of this research.

This analysis proves to be particularly important in that modern organizations are required to design and implement effective strategies in order to deal with the cultural heterogeneity accompanying the documented trend of increased diversity. As such, executives and employees visions concerning effective measures of integration should be aligned in order for the organization to successfully leverage the benefits associated with a well-integrated and diverse workforce. As criticized by scholars such as Schnabel, Kohaut, and Brixy (2011), the predominant unit of investigation within empirical studies is the firm itself leaving the perspective of employees rather under investigated at this time. As a result, the current study does not only examine the perceived benefits and most effective integration measures from an executive angle, but more importantly incorporates the perspective of current employees.
Hypothesis Development

As previously discussed, the continuous trend of increased workforce diversity is forcing organizations to face challenges pertaining to the management and integration of employees with different immigration backgrounds. Within the context of this paper, the term employee with immigration background refers to individuals who have either immigrated to a foreign country themselves, have had at least one parent immigrate, or is part of the first generation born in the newly adopted homeland. The successful integration of assembled workers from various backgrounds has been linked to numerous benefits related to higher quality outcomes and a greater competitive advantage of the overall organization (Raes et al., 2013). However, even though the benefits of an integrated heterogeneous workforce has been widely established within a broad stream of research, many top executives continue to predominantly hire employees in accordance to the dominant ethnic group evident in the company (Süß and Kleiner, 2007). The negative consequences related to these homogenous work environments range from stereotypical thinking to a loss of competitive advantage (Bouncken, 2004). Schnabel et al. (2011) argue that especially start-ups are in danger of creating a highly homogenous work environment as the organizational culture is often a mirror of the founder’s cultural and ethnic background. This desire of being surrounded by like-minded people with a similar cultural matrix creates a conflict with the need to attract and retain the brightest talents available in an attempt to ensure economic success of the business. The dissonance resulted from this conflict can further enhance negative stereotypical thinking or a resentment towards changes and diversity. Consequently, scholars have suggested the need for studies that isolate potential benefits gained from assembling a heterogeneous workforce as a motivational factor to facilitate diversity and integration within firms. Therefore, the current study will determine the different perceived benefits associated with
the integration of a diverse workforce within the context of star-up businesses. For the purpose of this paper, start-ups incorporate companies that have been in business for less than six years.

To overcome the literature gap suggested by Schnabel et al. (2011), the perceived benefits of integrating employees with an immigration background are assessed from two different perspectives with regard to employment status. Here, employment status can either refer to executives or regular employees of a company. In general, the vision of employees and executives should be aligned with respect to the perceived benefits derived from integration; however, the difference in the interaction with immigrant workers and in the functions performed by members of these two groups can potentially distort that alignment. We therefore hypothesize that:

\[ H1: \text{The perceived benefits associated with integration efforts differ between employees and executives in start-up companies.} \]

Considering the existence of a possible disconnect between the perception of employees and executives as related to the benefits of effective integration of immigrants workers, an interesting question to ask is whether or not that disconnect extends to the techniques generally employed by management to promote integration. An additional factor that could contribute to this potential difference is the level of active involvement of the employee (Doherty, 2010). As a result, the second hypothesis states:

\[ H2: \text{The perceived effectiveness of integration measures differs between employees and executives in start-up companies.} \]

An important component of effective integration lies in the proficiency of immigrant workers in the language of the host country. As suggested by prior research, language proficiency facilitates not only the integration process, but also the adjustment of immigrants to a new environment and culture (Peltokorpi, 2008). This adjustment extents to the proper etiquette
associated with communication between immigrant workers and other stakeholders, such as fellow employees and customers. Especially relevant is the language aspect within the context of start-ups. With limited personnel, employees of these firms tend to take several roles within the organization. For example, engineers might interact directly with clients or engage in other marketing activities in which cases language proficiency is critical. Overall, language proficiency might be of particular interest for employees in order to communicate with co-workers making it potentially less relevant to the completion of core tasks within the organization. Therefore, the relationship between perceived benefits and employments status might be affected by language proficiency. As such, we propose that:

\[ H3: \text{Language proficiency has an indirect effect on the relationship between employment status and perceived benefit of integration.} \]

**Methodology**

**Sample**

Even though the US is historically known for its high number of immigrants entering the country, other nations have also experienced an increase in workplace diversity in recent as well as historic times. For example, Germany has a documented influx of about 150,000 foreign workers a year over close to two decades (1955-1973), leading to a continuous debate on the perceived costs and benefits of cultural diversity; a debate often fueled by biases and unwarranted stereotypes (Ulrich, 2001). In a study of the effect of negative stereotypes on evaluative workplace outcome, Baltes and Rudolph (2010) discovered that negative attitudes with regard to immigration and acculturation are especially high in Germany in comparison to other European countries. These negative associations related to the topic of immigration are a spillover from the post-World War II era, when the Germany’s economy highly depended on the
support of temporary foreign workers. Most of these immigrants decided to reside in the country even after the stabilization of the economy leading to an increased competition in the labor market (Knortz 2008). This development in addition to the blue-collar jobs occupied by the immigrant fueled the spreading of negative stereotypical thinking towards the minority group. As evident, issues related to the integration of employees with immigration backgrounds are not a recent occurrence, but a phenomenon rooted within the country’s economic development. This provides the unique possibility to assess integration issues among a population that has inherited their believes to the younger generation. Thus, even employees of start-ups, which tend to occupy a younger demographic group, will already have been exposed to this issue of integration. These negative attitudes are in part indicative of a lack of effective assimilation or integration of immigrant populations, which can prove to be even more costly within a workplace setting. Although these issues are relevant to all organizations, they are of particular interest to start-ups as their success relies not only on the skill set of the workforce, but also on the ability of management to effectively design and implement policies to foster proper integration. Failure to accomplish this integration could be synonymous with bankruptcy for such organizations. A recent increase in the number of start-ups founded in Berlin further enhances the suitability of Germany as the context of this study (Winter, 2012). Considering that most of these newly founded companies have foreign national owners, the findings will have a higher level of generalizability as more than one nationality will be reflected in the perceptions expressed by executives and employees.

While the data collection of this study is limited to the work environment in Germany, results can be related to corporate environments in other countries with similar cultural dimensions. Wallenburg et al. (2011) determined that Germany and the US share similar
economic and cultural characteristics. According to Hofstede (1983), both countries scored comparably on three out of the five cultural dimensions. Therefore, the findings of this study will be of value to scholars and practitioners to any country experiencing increasing workforce diversity.

Study

The study was initiated by the Deutschlandstiftung Integration (2012), an initiative of the German government with the objective of lowering negative stereotypes towards immigrants and facilitating integration efforts across German communities. In cooperation with a marketing research and consulting company located in Berlin, Germany, a research study was envisioned with the purpose of identifying the perceived benefits associated with integrating employees into an existing workforce and suggesting effective techniques to facilitate this integration. To promote integration within the younger generation of employees with immigration background, the context of start-up companies was selected due to the significant younger age of the average employee in these organizations. In addition to contributing to the existing body of literature related to integration efforts and workforce diversity, the findings of this research will provide guidance in establishing further projects sponsored by the Deutschlandstiftung Integration in their continuous effort to facilitate the integration of immigrants and overcome negative stereotypes within the German population.

Survey Design

The survey design was conducted by the German marketing research company by enlisting the help of a panel consisting of Deutschlandstiftung Integration project managers, members of a German university, and a group of scientists. Considering the two distinct samples targeted in this research, two versions of the questionnaire were developed. While both surveyd
included predominantly the same questions, a few adjustments had to made with regards to the demographic characteristics. A preliminary survey of both versions was distributed to a focus group of executives and employees with an immigration background currently working for start-ups in Germany. Upon deletion of various questions in an effort to limit the completion time to under twenty minutes, the surveys were translated into English. After back-translations, a pre-test was conducted to assess the reliability and validity of the translated items.

The final questionnaires included an array of scales tailored towards the different constructs assessed in this study. A mixture of simple-dichotomy and checklist questions was alternated with open-ended questions, which provided the respondents with the flexibility to discuss important implications. The multi-item scales featured six-point Likert scales (1 = “very low” to 5 = “very high”) including “does not apply” option to eliminate forced answers responses.

**Items**

The perceived benefit scale was developed and tested by the previously named consulting firm and included a total of six items. All items reflected different functions of an organization that were able to be assessed by employees and by executives:

1. In your current company, the communication among each other is enhanced by the integration of employees with a migration background.

2. In your current company, the cooperation among each other is enhanced other result from integration of employees with a migration background.

3. The integration of employees with migration background promotes the innovativeness of the company you currently work for.

4. The integration of employees with migration background promotes the overall development of the company you currently work for.

5. The integration of employees with migration background promotes creativity of the company you currently work for.
6. The company you currently work for gains access to new customer groups by integrating employees with a migration background.

The participants had the choice to select answers within the range of 1=fully disagree and 6=fully agree.

The second multi-item scale assessed the effectiveness of different measures promoting the integration of employees with an immigration background. The six items included in this scale were introduced by the question “To what extent are the following measures helpful in promoting the integration of employees with an immigration background?”:

1. Intercultural trainings and workshops.
2. Language courses.
3. Mentoring employees with an immigration background.
4. Team building events.
5. Discussions and meeting.

The answer choices ranged from 1=not at all helpful to 6=very helpful.

Data collection

The target population for this research was limited to higher level executives, such as the founder of the head of the marketing department, and full-time employees of start-ups. A total of 850 companies were initially contacted via snail-mail including a cover letter aimed at introducing the study. The letter was then followed by a phone call allowing participants to complete the survey over the phone or request an additional copy of the survey. In addition to the traditional survey format, an online version of the German and English questionnaire was
uploaded to popular social network websites, such as Facebook and LinkedIn. The data collection resulted in a total of 114 completed and useful surveys.

**Results**

Out of 850 mailed questionnaire packages, 114 usable surveys were received resulting in a response rate of 13.42%. Table 1 summarizes the key findings associated with the demographic characteristics of our sample. Executives contributed 71.7% to the overall sample and while 68.6% of the respondents were men, only 35.2% actually reported an immigration background. Consistent with any expectation of employee demographic within early-stage companies, we find the majority of our respondents to be between 25 and 30 years of age. Over 50% of the surveyed companies reported to have been in business for less than four years and stated a staff of 10 employees or less (48.1%). Also depicted in Table 1, 35% of the surveyed executives indicated that their workforce consists of more than 30% of employees with an immigration background, which was closely followed by less than 10% of the hired staff to be immigrant workers with 32.5%.
Table 1

Demographic Characteristics

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>n</th>
<th>%</th>
<th>Company Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
<td><strong>Age of business</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive</td>
<td>81</td>
<td>71.1</td>
<td>&lt; 1</td>
<td>14</td>
<td>18.90</td>
</tr>
<tr>
<td>Employee</td>
<td>33</td>
<td>28.9</td>
<td>2</td>
<td>15</td>
<td>20.3</td>
</tr>
<tr>
<td><strong>Immigration Background</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40</td>
<td>35.2</td>
<td>4</td>
<td>10</td>
<td>13.5</td>
</tr>
<tr>
<td>No</td>
<td>74</td>
<td>64.8</td>
<td>5</td>
<td>9</td>
<td>12.2</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td>Number of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>9</td>
<td>8.0</td>
<td>&lt; 10</td>
<td>39</td>
<td>48.1</td>
</tr>
<tr>
<td>26-30</td>
<td>45</td>
<td>39.8</td>
<td>11-25</td>
<td>17</td>
<td>21.0</td>
</tr>
<tr>
<td>31-35</td>
<td>27</td>
<td>23.9</td>
<td>26-50</td>
<td>13</td>
<td>16.1</td>
</tr>
<tr>
<td>41-50</td>
<td>21</td>
<td>18.2</td>
<td>51-99</td>
<td>3</td>
<td>3.7</td>
</tr>
<tr>
<td>&gt; 50</td>
<td>12</td>
<td>10.2</td>
<td>&lt; 10%</td>
<td>26</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11% - 20%</td>
<td>15</td>
<td>18.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21% - 30%</td>
<td>11</td>
<td>13.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>31% &lt;</td>
<td>28</td>
<td>35.0</td>
</tr>
</tbody>
</table>

N=114

The examination of the data commenced with the verification of the reliability and validity of the two multi-items constructs (see Table 2 and 3). The Cronbach’s alpha coefficient was computed to determine the reliability of the two scales resulting in more than satisfactory coefficient levels in comparison to the commonly suggested level of 0.7 with 0.82 and 0.94 respectively. To assess the validity of the items, exploratory factor analysis was performed on each scale leading in the factor loadings. Upon applying a varimax rotation, two distinct factors with eigen values above 1 were identified within the perceived benefits scale as depicted in Table 2. The factor loadings above 0.7 suggest sufficient validity of all six items. Considering the nature of the items heavily loading on the first factor, this dimension is representative of the core factor within a company, such as the development of the overall organization and the enhancement of its innovativeness. In contrast, the second dimension can be labeled the relational factor as it encompasses the two items focusing on the communication and the cooperation among employees.
Table 2
Perceived Benefit Reliability and Validity

<table>
<thead>
<tr>
<th>Item</th>
<th>Cronbach's alpha</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>.82</td>
<td>.17</td>
<td>.93</td>
</tr>
<tr>
<td>Cooperation</td>
<td>1.8</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>.78</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>.75</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>New Customer</td>
<td>.83</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td>.82</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>Eigen value</td>
<td>3.17</td>
<td>1.29</td>
<td></td>
</tr>
<tr>
<td>% of variance</td>
<td>52.90</td>
<td>21.51</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 below reflects the unidimensional nature of the integration measures scale with all six items loading heavily on one factor and a single eigen value above 1. This dimension will be referred to from here on out as the development factor as it provides specific measures that a firm can apply to facilitate integration of employees with an immigration background.

Table 3
Integration Measures Reliability and Validity

<table>
<thead>
<tr>
<th>Item</th>
<th>Cronbach's alpha</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercultural Training</td>
<td>.94</td>
<td>.89</td>
</tr>
<tr>
<td>Language Course</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>Mentoring</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Team Building</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Management Statement</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>Eigen value</td>
<td>4.67</td>
<td></td>
</tr>
<tr>
<td>% of variance</td>
<td>77.75</td>
<td></td>
</tr>
</tbody>
</table>

The proposition that the perceived benefits of integration varies between employees and executives was investigated. T-tests results presented in Table 4 indicate significant differences between employees and executives perception of the underlying benefits of integration over both factors, which supports H1. Specifically, executives appear to value the elements constituting the
core factor better than employees as evident in the higher mean for executive as compared to employees. The difference in means in this case also proves to be significant with a t-value of 4.601 and a corresponding p-value of .000. Similarly, employees appear to value the elements constituting the relational factor better than executives as evident by the higher mean for employees. The difference in means in this case also proves to be significant with a t-value of -7.774 and a corresponding p-value of .000.

Table 4
T-Test Perceived Benefits

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Employment status</th>
<th>n</th>
<th>mean</th>
<th>df</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Executive</td>
<td>70</td>
<td>.243</td>
<td>77.81</td>
<td>4.601</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Employee</td>
<td>30</td>
<td>-.568</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational</td>
<td>Executive</td>
<td>70</td>
<td>-.389</td>
<td>62.5</td>
<td>-7.774</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Employee</td>
<td>30</td>
<td>.907</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 presents the T-test results for the investigation of the difference in perception between employees and executives at it pertains to the measures used to promote integration within their organizations. The difference in means in this case proves to be significant at the 10% level, with a t-value of -1.81 and a corresponding p-value of 0.76. This suggests that employees and executives views on the appropriate measures to be employed in order to promote integration are not aligned, which supports H2.

Table 5
T-Test Integration Measures

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Employment status</th>
<th>n</th>
<th>mean</th>
<th>df</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development</td>
<td>Executive</td>
<td>70</td>
<td>-.115</td>
<td>52.35</td>
<td>-1.810</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>Employee</td>
<td>30</td>
<td>.279</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

α = .10
In the assessment of the potential influence of German language proficiency on the relationship between employment status and perceived benefits of integration, regression analyses were applied. As shown in Table 6 below, there is a significant difference between the perception of executives and employees with regard to the need for German language proficiency as a prerequisite for successful integration (t-value = 5.26, P-value = .000 at α = .10).

Table 6
Regression Results Language Proficiency

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>coefficient</th>
<th>std. error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Status</td>
<td>1.857</td>
<td>1.618</td>
<td>5.26</td>
<td>.000</td>
</tr>
</tbody>
</table>

α = .10

The regressions between the independent variable language perception and the two dependent variables core and relational factor are seen in Table 7. The p-values of 0.001 and 0.000 indicate a significant relationship between the examined variables leading to the further assessment of the indirect effect of language proficiency.

Table 7
Regression Results Core and Relational

<table>
<thead>
<tr>
<th>Dependent variable: Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variable</td>
</tr>
<tr>
<td>Language Proficiency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent variable: Relational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variable</td>
</tr>
<tr>
<td>Language Proficiency</td>
</tr>
</tbody>
</table>

α = .10
The results and corresponding regression coefficients are summarized in the Figure 1 below, which suggest an overall indirect effect of German language proficiency on the assessed relationship between the three constructs. This supports the final hypothesis.

**Figure 1**
**Indirect Effect of Language Proficiency**

The total indirect effect of proficiency on the relationship between employment status and the core factor has a magnitude of -0.33, while the effect on the relationship between employment status and the relational factors is 0.43. Therefore, language proficiency is negatively related to the core components of a company indicating the lower need of German language skills to successfully complete tasks related to the core of a firm such as leveraging its innovativeness and its creativity. In contrast, speaking German appears to be more important for relational functions as suggested by the positive relationship between proficiency and the relational factor.

**Discussion & Conclusion**

The current study focuses on an important aspect of the management of diversity within modern organizations. That is, the possible disconnect between the executives and employees perceptions related to the perceived benefits of effectively integrating employees with an immigration background. To the best of our knowledge, no other study to date investigates this issue within the context utilized in this study. The findings demonstrate that these two groups regard the items encompassed by the core (creativity, innovation, new customer, development)
and the relational (communication, cooperation) factors differently. In fact, our analysis suggests that while employees put a higher value on the functions associated with the relational factor, executives tend to associate the items of the core factor with benefits derived from the proper integration of immigrant workers. Therefore, the confirmation of the disconnect between the benefits associated with employee integration provides a major contribution with regard to the development of effective policies and strategies by executives of an organization. Further, executives should motivate employees to focus on the positive benefits associated with a diverse workforce to eliminate possible negative stereotypes associated with immigration workers. Thus, by facilitating a shifting of the mindset and initializing a realization of the gained benefits within the workforce, a higher level of unity and company identification can be achieved leading to a higher level of overall productivity.

The second part of the study deals with the need to further understand the influence of the previously documented disconnect between employees and executives with regard to measures applied to promote integration. It is evident from our results that employees and executives do not share the same opinion on the helpfulness of the measures that are currently being deployed within the organizations. Overall, employees expressed a higher perceived importance of implementing and utilizing integration measures within a company setting. This finding extends the earlier assumption regarding the identified disconnect between employee and executive to not only apply to the perceived benefits, but also to the usefulness of integration measures. Therefore, it is essential for any organization to ensure an alignment of executives and employees vision regarding the benefits of integration. This alignment would allow for the development of strategies to which employees are more likely to bond with, making their implementation easy and reliable. Through the execution of these changes, the performance
and the productivity of employees will be enhanced and the integration of future employees with immigration background will become an intrinsic element of the company’s culture.

The final part of the analysis investigated the indirect effect of language proficiency on the relationship of employment status and perceived benefits. As hypothesized, employees and executives did express diverging opinions regarding the importance of language proficiency. Consistent with our previous findings, employees perceived language skills to be important for the relational functions within the organization, while executives did not attribute any relevance to the relationship between language skills and the completion of core functions. Therefore, while speaking the language of a host country might not be essential when performing core tasks, it does facilitate the communication efforts among employees within the organization. This can positively influence the work atmosphere and can foster an organizational culture that can leverage the cultural synergies introduced by the diversity in the workforce.

As previously mentioned, we are confident that the findings derived at from assessing German start-ups can easily be extended to other countries with similar cultural dimensions and immigration history. A few countries coming to mind are the United States, Canada, and Switzerland.

**Limitations**

The major limitations of the study are associated with the data collection process. The phone interviews were an inefficient sampling method due to the time constraints of executives and the long completion time of the survey. As a result, the final sample was relatively small and unbalanced as numerous surveys had to be excluded from the analysis due to missing data. The small sample size could have affected the significance of the test results. In addition, the two different surveys did not include exactly the same questions for both sample groups limiting the
potential comparison between executives and employees. Further, the restriction of the study to start-ups could be a potential limitation as the focus of these companies tends to be on growth and might shift with the maturity within the market.

**Future research**

Considering the identification of a disconnect between the perception of employees and executives, future research studies should investigate other areas within the organizations that could potentially be effected by these differences. In addition, the scope of the study should be extended to incorporate well-established companies into the sample. A longitudinal study could identify if executives express different perceived benefits and integration measures in relation to the age of the company. Further, the length of employment of the employees and the executives were not considered in this research, leaving room for future studies to fill this gap in the literature.
References


An Examination of Social Media Policy Use and US Small Business

Donna W. Luse, University of Louisiana at Monroe
Virginia J. Eaton, University of Louisiana at Monroe
Thomas G. Hodge, University of Louisiana at Monroe

Abstract

To remain competitive in today’s business environment, many U.S. small businesses have turned to social media tools to enhance their companies’ value and competitive advantage. With the increased use of social media tools, businesses are realizing they must consider establishing social media policies to provide employees with guiding principles for social media use.

This study investigated the extent to which small businesses in the United States have implemented social media policies and the enforcement of these policies. Of the 471 respondents from small businesses across the U.S., 71% of the respondents indicated their company had not implemented a social media policy, while 72% of the respondents indicated their company has one or more links to social media tools on their company’s web site. Thus, although almost three-fourths of the respondents have a social media tool link on their company’s web site, only about one-fourth of the companies have a social media policy in place at their company, which could expose these small businesses to potential internal and external ramifications and risks associated with social media use. The results of this study showed that there is a significant difference between the number of full-time employees and social media policy implementation. Over three-fourths of the respondents with policies indicated their social media policies were less than two years old. As compared to previous studies, this study indicated the number of small businesses implementing social media policies continues to increase.
The findings of this study indicate that the Human Resource Department in small businesses plays a vital role in policy development, policy monitoring, and policy enforcement. With the continued growth of social media usage by employees and companies of all sizes, it is evident that U.S. small businesses should be proactive in reviewing policy implementation to ensure employees are aware of social media use expectations.
Advertising Attitudes of Small Business

Henry S. Cole
University of Louisiana at Monroe

Eugenie Goodwin
University of Louisiana at Monroe

Abstract

Many small businesses advertise very little. A major reason is limited resources of small businesses; another reason appears to be somewhat negative attitudes that small business owners have toward advertising. Attitudes toward advertising have to do with the belief that advertising is a truthful, reliable source of information about the performance of products. This study was developed to assess the advertising attitudes of small business owners and to examine the relationships of these attitudes with several personal and business variables. The survey instrument was designed to obtain various data from small business owners throughout the United States. The advertising attitudes measurement was adapted from an advertising skepticism scale. A sample of 310 respondents was gathered via an online survey. The mean of the responses revealed a slightly positive view of advertising. Gender, political viewpoints, age, education, ethnicity, and location were tested for relationships with advertising attitudes. Only age had a statistically significant relationship with advertising attitudes. Type of business, legal form of the business, franchising, and annual revenues were examined, and only legal form of the business was not significant. The study found that small owners are slightly positive in their view toward advertising and that their attitudes were mainly related to business factors and not personal factors. The study concluded that for small business owners, “It is all about business!”
Using Creative Methods to Develop the Business Model
Claire Allison Stammerjohan, University of Louisiana Monroe

Abstract

Often, entrepreneurial literature describes the development of new business models as a way to achieve insight into the characteristics of successful new ventures and successful entrepreneurs. This workshop takes an alternative approach, suggesting that instead of accidentally discovering new business models, these business models can be suggested and explored using basic creativity skills.

First, some recent literature on business models is reviewed. The conclusion is that business models should be relatively comprehensive (Gerard and Bock 2011), so that “mindless innovation” doesn’t mislead businesses from their shortest route to success (Swanson and Ramiller 2004; Goethals 2011).

Several authors suggest the importance of creativity and/or innovation in entrepreneurship. Ojastu, Chiu, and Olsen (2011) identify innovation as one of the important “clusters” in their qualitative, mind-mapping study of entrepreneurs (p.414). Puhakka (2011) located creativity centrally in his model of “entrepreneurial alertness” (p85 & p94).

Yuwei and Manning (2009) follow Mintzberg (1979) in assuming the business model is something that results from management actions, whether “planned, emergent, or realized” (p.50). From a design standpoint, although we acknowledge happy accidents, we prefer decisions to non-decisions. It therefore makes sense to subject business model development to the same
type of rigorous analysis—and creative thought—that we believe improves success rates in business.

To that purpose, this workshop invites participants to discover a basic creativity model, and to practice using that model. In addition, six different ideation techniques are explored to show the way that different models can be developed, evaluated, and improved. In addition, examples from a recent MBA class show how useful the technique can be in generating novel and insightful ideas.
References


The Entrepreneur’s Guide to Creating Positive Employee Relations
Cindy Strickler-University of Louisiana at Monroe

❖ Objectives of Workshop
   ➢ To understand the general aspects of a manager’s job
   ➢ To understand the do’s and don’ts of positive employee relations
   ➢ To learn the 3 steps to effective performance management
   ➢ To understand the importance of employee recognition

❖ General Aspects of a Manager’s job
   ➢ Attributes of best and worst managers and conclusions we can draw
   ➢ Major job functions of a manager’s job – planning, organizing, leading, controlling – from an employee perspective
   ➢ Communication skills
   ➢ Participants will complete a listening exercise.

❖ Do’s and Don’ts of Positive Employee Relations
   ➢ Quote exercise – “The Checker Gets what the Checker Checks”
   ➢ Ingredients of employee relations
   ➢ How to use these ingredients to promote positive employee relations
   ➢ Practice session using “We Need to Talk” scenarios

❖ Steps to Effective Performance Management
   ➢ Plan – Participants will practice writing SMART objectives
   ➢ Monitor – Participants will practice giving effective feedback
   ➢ Review and evaluate
   ➢ Practice session using “Difficult Employee” scenarios
 Importance of Employee Recognition

➢ Why is it important
➢ Guidelines for effective employee recognition
➢ Recognition ideas

 Wrapping it Up

➢ Good employee relations is all about good communications
➢ Hire well – starts with a good job description
➢ Training is a must, beginning with orientation
➢ Say thank you!
➢ Have well-established policies and procedures
➢ Keep good records – document well
➢ Focus on the positives, but fix things that need fixing!