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ABSTRACT

Background

The emergence of the importance of business models in management research is an area of focus gaining greater attention and scrutiny. Increased attention to business models began to appear around 1990 with the advent of the internet technology boom. Technology's impact on the nature and pace of business created a new level and speed of change in industry and thus a need for firms to be able to develop the right business models in order to be able to capture the constantly changing opportunities in a given market (Teece, 2010). Business model inquiry continued to progress beyond the IT sector by examining the overall nature of a business model and providing various conceptualizations of the construct. These conceptualizations generally describe a plan for engaging in business activities (Applegate, 2000; Weill & Vitale, 2001), a model or representation of a business (George & Bock, 2009; Osterwalder, 2004), or a framework for how a business operates (Amit & Zott, 2001).

More recent work published in top management journals combines aspects of these earlier studies and portrays business models as "the content, structure, and governance of transactions" designed so as to create value through the exploitation of business opportunities (Amit & Zott, 2001: 511; Zott & Amit, 2008). Teece (2010) continues the refining of both the nature and domain of business models as he depicts business models as "the logic, data, and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise

delivering that value" while specifically focusing on new opportunities (Teece, 2010: 179). Finally, George and Bock (2011) find that business models express the configuration of organizational elements designed to create value through entrepreneurial enactment whereas strategy is the dynamic set of initiatives and processes that enable the firm to compete in value creation process.

Although business models are becoming more and more recognized as a central aspect of business, there continue to exist important challenges which create barriers to being able to gain a common understanding of the overall nature of business models, how business models are manifest, and how the choice of business model can impact an organization (Zott, Amit, & Massa, 2011). One of the key challenges in understanding business models is the focus by many researchers on established firms. As a firm matures, aspects such as business models, strategy, or product marketing plans begin to become entangled making it difficult to understand where one stops and another starts (Yip, 2004). To be able to address the distinct domain of business models, it is helpful to be able to detangle the presence of these multiple management domains which help explain overall firm dynamics. One of the most useful ways to accomplish this task is through a focus on the early stages of a new venture (Casadesus-Masanell & Ricart, 2010; Yip, 2004). As an entrepreneur moves through the entrepreneurial process from opportunity identification to opportunity pursuit thus engaging in the entrepreneurial enactment process, the boundary conditions between management research domains are often most distinct (Casadesus-Masanell & Ricart, 2010; McMullen & Shepherd, 2006; George & Bock, 2011). It is within this context of new ventures that I develop this dissertation to be able to more fully address the needs outlined by Zott, Amit, and Massa (2011) in their recent review:

> "Despite the overall surge in the literature on business models, scholars do not agree on what a business model is. We observe that researchers frequently adopt idiosyncratic definitions that fit the purposes of their studies but that are difficult to reconcile with each other. As a result, cumulative progress is hampered. Current research has established the need to continue to move beyond current properties of business model definitions to be able to more clearly understand the broader nature of the construct (Zott et al., 2011: 1020)."

The purpose of this dissertation is to explore the broader nature of business models through an examination of the following questions: 1) What are the dimensions of the business model construct? 2) How do these dimensions manifest themselves within actual ventures' business models? 3) What is the impact of the dimensions of business models on new ventures? This dissertation employs a three essay approach to address this study. First, I focus on identifying the theoretical foundations of the business model construct in order to be able to articulate the dimensions of a business model as presented within the current literature. This is followed by a qualitative study centered on examining whether or not the dimensions identified in Essay One are actually present in real ventures. Third, I conduct an empirical study that addresses the question of what impact do the dimensions identified in the first essay and confirmed in the second essay actually have on new ventures.

Essay One

Essay One, More than meets the eye: The gestalt nature of business models sets the foundation for this dissertation by focusing on developing a clearer understanding of the nature of business models from a theoretical basis. Academic interest in the business model construct began to grow in the 1990's with an emphasis on the rising IT sector. Early studies centered on the links between the rapidly changing technological advances and business process (Wirtz, Schilke, & Ullrich, 2010). These studies presented the concept of business models as a framework for addressing the information inflows and outflows associated with the growing complexities of IT processes (Timmers, 1998). This IT centered perspective of business models continued to evolve and expand beyond the IT sector to encompass a wider perspective of firm's dynamics with a focus on a firm's relationship with external exchange partners (Amit & Zott, 2001; Magretta, 2002). Through this expanded view of business models within the overall firm, attention was turned to studies centered on providing definitions of a business model. Reviews such as those completed by Timmers (1998), Morris, Schindenhutte, and Allen (2005), Schweizer (2005), Currie (2004), Hedman and Kalling (2003), Amit and Zott (2001) and others have attempted to synthesize the broad stream of growing research primarily by defining business models and identifying elements of various types of business models. However, there is still a lack of understanding of the business model construct (Zott et al., 2011).

To address this persistent lack of understanding, I examine the theoretical foundations of business models as contributed by other more established research domains. Through this examination, four key dimensions are identified and found to be present within existing business model literature over 71% of the time. Even with such a high level of consistency in discussing what a business model is, there remains confusion about the broader nature of business models as evidenced in the earlier quote by Zott et al. (2011), indicating that there may be a missing element within the business model construct.

To address this missing element, I employ the lens of gestalt theory to help explain the broader nature of business models. Current research discusses business models by identifying the individual dimensions of the construct presented in various definitions. Gestalt theory takes a different perspective. Rather than the whole being determined by the presence of the individual elements, gestalt theory suggests that the individual elements gain meaning from being a part of the whole (Wertheimer, 1944). Gestalt properties are those that rely on the relationship that exists when individual elements are combined and helping establish an understanding of the whole not able to be derived by examining the individual components alone (Kimchi, 1992). It is through this lens of gestalt theory that an additional dimension of business models becomes visible, which is identified in this essay as opportunity alignment. Opportunity alignment provides a link between business models and opportunities creating a more developed understanding of the broader nature of business models. This study extends the current research on business models by providing an in-depth analysis of current research to identify the consistency with which the literature discusses business models and by moving beyond the analysis to propose an additional dimension of business models through the use of gestalt theory. It is this enhanced perspective of business models which provides the basis for the remaining two essays within this dissertation.

Essay Two

Essay Two, Understanding the nature of business models within new ventures builds on the findings within the first essay and attempts to validate the presence of the four foundational dimensions of business models as well as the presence and nature of the newly identified dimension of opportunity alignment in real world early stage ventures. Essay Two is a qualitative study conducted using an in-depth case study format following Shane (2000). Through the use of case studies of eight early stage ventures involved in pursuing new opportunities, I examine each new venture's business model. Specifically, I explore the assertions that (1) the four dimensions of business models identified within Essay One are central to and commonly found within a venture's business model across ventures and (2) through gestalt theory, the nature of business models is more than simply the combination of the four commonly referenced dimensions identified in existing literature, and includes the dynamic oriented dimension of opportunity alignment.

Essay One provided the basis for extending our understanding of the nature of business models from a theoretical basis using existing literature and the lens of gestalt theory to identify the key dimensions of business models. One would logically ask the next question which is, do these dimensions actually exist within real world ventures. Through this study, I engage with entrepreneurs and their new ventures to better understand their perspectives and their use of business models as they attempt to grow their ventures. This context provides the ability to explore real time what dimensions are part of each venture's business model and how each of the dimensions manifests itself within the venture.

The findings provide support for the presence, in varying degrees, of the dimensions of structure, value creation, value capture, value networks and the additional dimension identified in Essay One of opportunity alignment. Through the validation of the presence of these dimensions within business models, the case study results also indicate specific areas within various dimensions where many entrepreneurs struggle to develop their business models. Additionally, the findings provide insight into the nature of changes within business models and the potential impacts that changes to business models can have on a new venture. Essay Two provides evidence of the theoretical foundations and dimensions of business models establishing a basis for more detailed empirical studies aimed at gauging the impact of business models on venture outcomes.

Essay Three

Essay Three, The impact of business model dimensions on new venture performance is the third component of this dissertation and seeks to answer the question of so what. Specifically, this essay provides insights into whether or not the dimensions identified in Essay One and validated in Essay Two actually have an impact on new venture performance. In so doing, I examine the dimensions within the context of the emerging debate regarding the impact of a more fixed perspective of business models versus a dynamic perspective. From one perspective, a business model is an architectural blueprint of a venture outlining the plan for pursuing a new opportunity (Teece, 2010), however from the other perspective, a business model also addresses the relationship between the blueprint and the need to be able to adjust to ensure the right alignment between the model and the opportunity (Demil & Lococq, 2010; Rhoads, 2013a). It is the relationship between the blue print of a venture's model and the continual alignment between the model and the opportunity that is beginning to provide greater clarity of understanding regarding the broad nature of business models. It seems that both the architectural blueprint perspective and the dynamic or alignment perspective are constructive in understanding the nature of business models. The question then is: what is the impact of each perspective on new venture performance?

The architectural blueprint perspective of business models addresses the nature of venture components in the form of a blueprint or model at a given point in time (Demil & Lecocq, 2010). The blueprint perspective of the business model has been the focus of much of the work to date and is comprised of the dimensions of structure, value creation, value capture, and value networks (Magretta, 2002; Zott & Amit, 2001). The first portion of this study examines how the presence of these four dimensions within a venture's business model can impact venture outcomes.

Whereas the blueprint perspective of business models addresses the architectural model or template of how a venture will be positioned to pursue a new opportunity, the question remains, how does a business model work within a changing context? It is clear that new ventures are engaged in a process of continual change in order to be able to be successful in the pursuit of new opportunities. It is this continual change that makes the blueprint perspective of business models insufficient in its ability to explicate the nature and impact of business models. The dynamic perspective addresses the evolutionary element of business models in order to be able to pursue an opportunity in a dynamic context (Teece, 2010). The second portion of this study focuses on the dynamic nature of business models and examines the role of opportunity alignment as a factor in determining new venture outcomes.

Whereas the ability to maintain the proper alignment between a venture and its focal opportunity is argued to be essential in achieving new venture success, there are additional factors which can influence this relationship. Essay Three also examines the role of technology as an internal factor and the degree of demand uncertainty in a chosen market as an external factor as aspects which impact the effects of business model dynamics. Technology that is extremely innovative or radical in nature can often create challenges when introduced due to the asymmetries that can exist between the new venture and the market. Within new ventures, it is important to note that with attempts to commercialize highly radical technology, the more the need arises to change or adjust the business model in order to find the proper alignment with the market and the opportunity. It is proposed that radical technologies can impact the relationship between business model changes and venture performance.

Additionally, the nature of the market can also influence the relationship between business model changes and venture performance. As a venture enters a new market, the degree of uncertainty can impact the venture's activities and outcomes (Dess & Beard, 1984; Penrose, 1959). The greater the demand uncertainty of a market the more difficult it is for a venture to accurately assess the customer preferences for the venture's products or service and to predict how customer preferences or demand may change which can impact the acceptance of the venture's products and services (Gatignon & Xuereb, 1997: Narver & Slater, 1990). In this context, it is logical to note that the greater the demand uncertainty within a market, the more difficult it is for a venture to develop the right business model on the first attempt (Gambardella & McGahan, 2010). The presence of demand uncertainty within a focal market precipitates the need for a new venture's business model to be continually adjusting. Therefore I contend that the degree of demand uncertainty within the market will moderate the relationship between the change in a venture's business model and venture performance increasing the importance of business model change in uncertain environments.

The findings of this study indicate that both the blueprint and the dynamic perspectives of business models are important in a new venture's attempts to achieve positive performance outcomes. Additionally, the venture's technology and the degree of demand uncertainty within the market can impact these outcomes moderating the relationships between business model changes and venture performance. These findings are among the first to address empirically the impact of business models on new ventures and extend our understanding of the both the nature and impact of business models through its ability to provide an answer to the question of so what as previously indicated.

Implications

The focus of this dissertation is on the need to develop an understanding of the dimensions which make up business models, test the extent to which the proposed dimensions are found within existing ventures, and finally to understand whether or not the proposed and validated dimensions actually have an impact on new ventures. The findings provide useful insights into what a business model is and helps address the calls of McGrath (2010), Zott, Amit, and Massa (2011), and others to develop clearer insights into the nature and impact of business models. In so doing, this dissertation extends the boundaries of business model research in several areas. An important element of this extension is the clearer delineation of the construct beyond simply a definition of business models. This is important as it can help research move beyond the focus on definitions to more meaningful contributions which will help articulate the unique domain explained by the business model construct. As business model research progresses, it must be able to provide distinct insights into aspects of a firm that other domains cannot provide. This study helps sets the foundation for this progression in its positioning of business models as a framework for understanding how a venture addresses new opportunities and the impact of business models on opportunity pursuit. Additional work focusing on the relationships between business models and opportunities would not only develop the business model construct, but would also help develop the growing focus within entrepreneurship research on opportunities. Opportunities are noted as the emerging focus within entrepreneurship research yet there is a lack of frameworks and theories which help explain opportunities (Busenitz et al., 2003). Business models could be an important framework which can provide new understanding in this area.

An additional implication of this dissertation is the potential to add to the growing focus on isolating mechanisms within resource-based theory through the consideration of business models as a firm resource. Emerging work on resource-based view (RBV) is examining the nature of isolating mechanisms and the role such mechanisms play in a resource or bundle of resources to potentially lead to a sustained competitive advantage. There is an opportunity to examine the role of business models as a resource and the impact of maintaining proper opportunity alignment as an isolating mechanism within a new venture providing the basis for achieving a sustained competitive advantage. In this context, not only is the business model a key resource, but the process of adjusting the business model may also be a key element leading to such factors as the development of causal ambiguity, social complexity, and path dependence. This type of study would extend the RBV framework within entrepreneurship research as well as further explore the emerging focus on performance differences within entrepreneurial ventures (Foss, 2011). The findings of this dissertation provide a backdrop for understanding the role of opportunity alignment as an isolating mechanism and establish a basis for additional work within this area of focus. In so doing, I argue that the results of this dissertation not only establish new understanding and insight relating to the nature and impact of business models, but also establish the foundations for future work which will also contribute to the on-going development of other existing management domains helping to create boundary conditions for the business model construct as well as a basis for building legitimacy as an emerging domain of focus.

MORE THAN MEETS THE EYE: THE GESTALT NATURE OF BUSINESS MODELS

ESSAY ONE ABSTRACT

As business model centered research has grown significantly over the last decade, the focus has primarily been on establishing an initial understanding of the construct. Much of the existing research has focused on defining business models, yet recent research continues to highlight the lack of common understanding of the nature of business models. In this study, I examine the theoretical foundations of business models and the extent to which each contribution is found within current research through an in-depth analysis of current business model research. Four dimensions of business models are identified and found to present in business model research over 70% of the time. However, recent reviews continue to highlight the continued lack of understanding of the construct alluding to the notion that there is more to business models than the four commonly cited dimensions of structure, value creation, value capture and value networks. Employing the framework of gestalt theory, I propose an additional dimension of business models, opportunity alignment which helps explain how the four foundational dimensions work together to establish clearer understanding of the nature of business models.

Keywords: Business models, gestalt theory, value

INTRODUCTION

As business model focused research continues to emerge, many questions remain that need to be addressed. The emphasis on business models in management research is a recent and growing phenomenon. Increased attention to business models began to appear around 1990 with the advent of the internet technology boom. Technology's impact on the nature and pace of business created a new level and speed of change in industry and thus a need for firms to be able to develop the right business models in order to be able to capture the constantly changing opportunities in a given market (Teece, 2010). Business models are gaining focus as a tool for understanding and explaining patterns of business behavior. However, an understanding of the explanatory ability of business models and how business models facilitate the crafting of a viable opportunity for a venture remains largely underdeveloped.

Initially business model research was mainly set in a technological context examining the relationships between the emerging importance of information technology and the internet on firm dynamics (Wirtz, Schilke, & Ullrich, 2010). Within the IT sector, business models were often depicted as the framework for information inflows and outflows facilitating IT process within a firm (Timmers, 1998). The IT perspective of business models continued to develop and expanded to encompass a wider perspective of a firm's operations with a focus on a firm's relationship with external exchange partners (Amit & Zott, 2001; Magretta, 2002). In this early work, substantial attention was given to defining business models in search of a common understanding. An extensive review of the business model literature yields more than 40 different definitions.

Although a definition is a valuable point of departure for specific research projects, a unified definition of business models does not seem to be forthcoming nor should it be expected given the track record of entrepreneurship and other fields of study in the social sciences. More importantly, definitions alone typically stop short of creating a clear picture of the boundary conditions and explanatory ability of business models. I argue that business model inquiry needs to move beyond definitional issues and focus more on boundaries, the nature of the construct, and the dimensions that make up business model. It is this level of progression that allows for a clearer understanding of the elements of business models, the relationships between those elements, and identification of the unique domain of business models through establishing distinct boundary conditions in order to understand the theoretical basis of business models (Dubin, 1969). Although much of the existing research contains many commonalities regarding the elements that contribute to a business model, current research still calls for a clearer depiction of the construct and its explanatory focus (Zott et al., 2011). In this light, the purpose of this paper is to identify the commonly cited elements or dimensions of business models and examine the dimensions through the lens of gestalt theory as a means of moving beyond definitions toward construct clarity and understanding the broader nature of business models.

Through this analysis, several important contributions are provided. First, I examine the business model construct and the core management domains which have contributed to our current understanding of business models. This provides a theoretical basis to help clarify the elements of the construct as an important initial step examining business models as a whole. Second, I conduct a thorough review of existing business model literature to understand how the contributions of existing research domains are manifest in business model focused research. In this step, the commonly identified elements or dimensions of business models are articulated and validated using current academic research in high quality journals. This provides the basis for understanding the theoretical foundations of business models, the key elements of business models and most importantly, the nature of business models as a whole. Finally, this paper proposes an additional dimension of business models utilizing the lens of gestalt theory to help bridge the gap between understanding the individual elements of business models and understanding the distinct explanatory domain of business models.

In order to accomplish these contributions, this paper will proceed in the following manner. I begin with a review of the current state of business model understanding. This is accompanied by a review of the foundational domains of organization design, strategy, and customer marketing highlighting their contributions to business model research. Following this section, I conduct an extensive literature analysis to assess the extent of the contributions in current literature and articulate the most commonly cited dimensions of business models. I then employ gestalt theory to address the composite nature of the business model construct and explore the relationship between the dimensions when combined. Finally I conclude with a proposed path for future research.

CURRENT BUSINESS MODEL RESEARCH

Business models as a focus for both practitioners and researchers has been developing as an important concept in recent years for several reasons. First and most visibly is the wide spread emergence of the internet in the late 1990's and early 2000's. Business models appeared often at this time as a mechanism for explaining the rise and role of technology within a firm. Second, technological innovation increased at rapid rates. With innovation occurring at faster rates, new firms began to emerge with new business approaches that could allow ventures at all stages of their life cycles to pursue new opportunities. This phenomenon introduced a new dialogue about the relationship between innovation and business models (Hedman & Kalling, 2003). A third factor contributing to the rise of business model importance is the issue of globalization. With access to information in new ways, the ability to communicate with, transact with, and service exchange partners across multiple countries became a viable and necessary option for firms. With the emergence of the internet, the global business community was beginning to be accessible by new firms of all sizes and ages.

The ability to acquire information, an increase in the speed of business and new technology introductions, and the ability of firms to globalize were all effects of the internet and technology boom of the 1990's. These factors created changes in the global economy at an increasing pace. These changes dealt with product innovations, emerging and new markets, regulatory adjustments, and many other aspects of industry which impacted firms in seemingly new ways (Rackham & DeVincentis, 2000). Traditional key firm characteristics such as the size and age of a firm became less critical as businesses attempted to commercialize new products, enter new markets, and service new customers. Ultimately, these changes created the opportunity for all businesses to adjust their architecture and focus in order to be able to take advantage of the new opportunities within markets, attract future investors and develop more efficient and viable ways of doing business. The internet and technological innovations previously discussed provided alternatives to existing means of conducting business. These changes in technology resulted in firms creating new business models to be able to take advantage of the emerging opportunities leading to a rapidly increasing focus on understanding business models (Hedman & Kalling, 2003).

Accordingly, academic interest in the business model construct began to increase in the 1990's. Reviews such as those completed by Timmers (1998), Amit and Zott (2001), Hedman and Kalling (2003), Currie (2004), Morris, Schindenhutte, and Allen (2005), Schweizer (2005) and others have attempted to synthesize the broad stream of emerging research primarily by defining business models and identifying elements of business models. Table 1 below outlines five of the most commonly cited definitions found in the reviews listed above as well as those found generally within business model publications in top tier management journals. The definitions begin with Timmers' early work in 1998 and continue through to recent work by Teece in 2010.

TABLE 1

Review of Commonly Cited Business Model Definitions

Author(s) and Year	**Definition**
Timmers, 1998	The business model is “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues” (p. 2).
Amit & Zott, 2001; Zott & Amit, 2007, 2008	The business model depicts “the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities” (2001: 511).
Chesbrough & Rosenbloom, 2002	The business model is “the heuristic logic that connects technical potential with the realization of economic value” (p. 529).
Magretta, 2002	Business models are “stories that explain how enterprises work. A good business model answers Peter Drucker’s age old questions: Who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?” (p. 4).
Teece, 2010	“A business model articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value” (p. 179).

These definitions have provided a basis for additional work on the subject and have been an important part of the evolution of business model research (Zott et al., 2011). Visible within these definitions are the themes of value and a firm's relationships with its exchange partners throughout its value network.

Timmers (1998) proposed a definition of business models which focused on the ability of a firm to address technological innovation and was based primarily in an IT context. Other aspects of business models center on creating a framework for how a firm makes money (Chesbrough & Rosenbloom, 2002; Morris et al., 2005). In their review, Morris et al. (2005) continue with a call for additional work on understanding more clearly what makes up a business model and how a business model affects firm performance. Magretta (2002) portrayed business models as stories that explain key questions regarding a firm. Zott and Amit (2007) suggested a broader perspective of business models addressing multiple stages of a venture's value chain and more broadly, the venture's value network. Specifically they identified key aspects such as value and relationships with exchange partners. Zott and colleagues continued this synthesis in a recent review concluding with a call to establish greater clarity of the construct and to identify where exactly business models fit within the challenge of explaining firm dynamics (Zott et al., 2011). The common conclusion for each of these reviews is that there is still a wide variance in understanding of the construct and the role of business models in explaining firm performance.

Despite the increasing number of publications focused on business models, there remains a lack of clarity about the true nature of the construct. Some have argued that business models are a static view of a firm's organization (Baden-Fuller & Morgan, 2010); whereas others have proposed a more dynamic view discussing the role of business models in the innovation process (Gambardella & McGahan, 2010; Sosna, Trevinyo-Rodríguez, & Velamuri, 2010). Further still, recent research has proposed the need to, and even attempted, to summarize the various definitions and representations of business models in order to synthesize the vast body of articles into a comprehensive definition and understanding of the concept (Baden-Fuller & Morgan, 2010; Fetscherin & Knolmayer, 2004; Schweizer, 2005; Zott & Amit, 2010). This emphasis on definitions provides understanding regarding the commonalities that are beginning to emerge in business model research. However, critical limitations can develop as well. Definitions can often lead researchers down the path of attempting to identify which definition is right among the many proposed or even in the development of new definitions. We can find evidence of this in the emergence of other domains such as entrepreneurship. Early work focused on defining what entrepreneurship is and who is an entrepreneur. As research continued to examine these questions, the push began to move away from defining entrepreneurs and more toward identifying the boundary conditions that exist between entrepreneurship focused research and other domains. A key step in this process is a clear understanding of the foundations of the domain or construct of focus. This step has started to emerge in more recent work discussing the relationship between business models and other core management domains. Specifically, Teece (2010), Zott, Amit, and Massa (2011), George and Bock (2011) and others have individually highlighted or alluded to contributions from three specific domains: organization design, strategy, and customer marketing.

Understanding how each of these foundational disciplines contributes to our knowledge of business models not only provides a theoretical basis for the continued development of the construct, but also helps to draw boundaries aiding in the identification of the distinct domain of business models. The following section will consider these foundational domains and articulate the core focus and assumptions of each, how each has contributed to the development of the business model construct and the limitations of each in addressing business models as a whole.

Organization Design

Organization design is made up of several aspects that focus on the organization as a central unit of analysis. Essentially, the focus of organization design research is based on how to bring people together, coordinate their activities and relationships, and produce as much output as possible. The idea is that an organization is made up of individual actors grouped together in order to accomplish some common purpose. The more complex the task to be accomplished the more complex the organization. Large or complex tasks are broken into smaller manageable segments and actors grouped according to a specific component of the task to be accomplished. This creates the need for interdependencies and coordination between groups in order to accomplish the whole task in an efficient manner (Pfeffer, 1978). Jeffrey Pfeffer defined organization design as the process of grouping activities, roles, or positions in the organization to coordinate effectively the interdependencies that exist (Pfeffer, 1978: 25). The basis of organization design is the ability to coordinate individuals in such a way that the goals of the organization can be accomplished and is referred to as structure (Cyert & March, 1963). The core assumptions are based on people organizing to accomplish goals and is focused internal to the firm (Zott & Amit, 2007). The central focus is to bring together disparate parts, coordinate them in such a way as to control the flow of information, reduce uncertainty, and delineate lines and types of authority all in order to accomplish a common goal: an internally focused perspective (Child, 1973). Structures within organizations develop through on-going differentiation of various key activities. Thompson (1967: 51) defines structure as the "patterning of relationships or activities in organizations." Karl Weick (1969) discussed the idea that structure is the relationship between roles or responsibilities within the organization.

Through this overview, it is clear that there are basic concepts of organization design that are a part of the foundation of business models, namely the need to structure effectively to achieve goals. In this context, business models are depicted as the organizational structure that a firm must take in order to effectively transact with partners (Zott & Amit, 2008). The structure of the firm is central in the organization design perspective of business models. The nature of business models within organization design is primarily a static model of firm configuration (Amit & Zott, 2001). Business models as organizational form are important not only as means of transaction focused configuration with partners but also as a method of signaling firm legitimacy to the market and investors as new opportunities are undertaken by the firm (Sanders & Boivie, 2004). Structure is an important part of this process and contributes to our understanding of what comprises a business model and is often included in the various definitions provided in current research.

However organization design, and specifically structure, has a different focus than the overall concept of business models and is not alone fully able to provide an understanding of the overall basis of a business model. Organization design is internally focused on the coordination and allocation of resources, responsibilities, and authority. Although this is an important element to consider within business models, it must also be noted that business models involve a broader perspective of structural issues not addressed by organization design (Amit & Zott, 2001). Business models address the structural issues of a firm from both an internal perspective as well as from an external perspective presenting the structure of the firm as a framework for how best to engage with potential exchange partners (Yunus, Moingeon, & Lehmann-Ortega, 2010). Thus organization design contributes one important component of the theoretical foundation of business models in the attempt to clarify the overall concept of business models: structure.

Strategy

A central question for strategy research is: "What decisions should be made in order to effectively compete so firm value can be increased?" Strategy as a field of study provides important insights regarding a firm's quest to gain a sustained competitive advantage. In so doing, strategy focuses on the decisions of managers regarding firm initiatives such as innovation, top management teams, responses to industry structure, resource acquisition, rents and value chain analysis. (Barney, 1991; Casadesus-Masanell & Ricart, 2010; Porter, 1985).

Strategy is an important contributor to current business model understanding. A key theme of business models is value (McGrath, 2010) and embedded in the question of competitive advantage within strategy research lie several central elements which deal with value such as: value creation, value capture and a firm's value chain. Value creation, is more recently emerging as a central concept of relevance in better understanding a firm's quest to gain a competitive advantage (Sirmon, Hitt, & Ireland, 2007). In this view, value creation is expressed as firm decisions on how to use resources or resource bundles in way that will yield a stronger resource set in relation to competitors. Contributing to the concept of business models, value creation within this context is focused on the ability to produce a product or service that is superior to competitors. Although an important component of business models, this view of value creation is limited to only one aspect of business models: the output. This is an important element of business models yet limited in its explanatory ability of business models within the strategy lens of research.

Additional contributions of strategy lie in the concept of value capture. Within strategy, the idea of value capture or rent appropriation underscores the importance of garnering economic value from efficient uses of resources by a firm (Crook, Ketchen, Combs, & Todd, 2008). The importance of this concept within business models is the ability to create value not only through the business model but to have mechanisms in place to capture the value as well. For example, the search service provided by Google is an important value creating service for users, but by itself does not lead to increased revenues or profits by Google. There had to be developed a mechanism through which the value of search to customers could lead to economic value for Google. This focus on value capture is companion to value creation in many current definitions of business models and central to the overall concept of business models (Baden-Fuller & Morgan, 2010). Although the strategic focus of rent appropriation contributes to our understanding of one aspect of business models, its profit focus is not able to address the broader picture of business models.

A third contribution of strategy to current business model understanding is the concept of the value chain. Within strategy, the value chain is a main framework for the decision making process of managers. Porter (1985) discussed four primary steps associated with manager decisions making and value chains. They are (1) the ability of the managers to identify the focal business (2) the ability to identify key activities (3) determining product focus and (4) understanding which activities were most important for the firm to undertake. These four steps, known as value chain analysis, contribute in many ways to understanding the role of the value chain in business models; however the value chain is expanded beyond these steps to a broader perspective of potential external partners within the context of business models. Amit and Zott (2001) discuss this as the framework of potential exchange partners where value creation may take place within the business model context. This framework extends beyond the linear set of activities that ranges from raw materials to final product output traditionally associated with a value chain. In the context of business models, this framework links previously unlinked exchange partners together creating a broader value network within which a venture must exist (Peppard & Rylander, 2006). It is within this broader perspective of a value network where a firm is able to identify potential exchange partners in the pursuit of specific opportunities regardless of the partners' affiliation or placement within a traditional value chain. The value network provides the basis to be able to develop relationships with exchange partners and create value within those relationships leading to optimal performance (Zott et al., 2011). Business models delineate the configuration of the firm and the links established with exchange partners across the value network to create and capture value regardless of each partner's traditional role in moving from raw materials to end product. As evident, strategy contributes multiple facets to our current understanding and existing definitions of business models yet business models extend beyond the strategic perspectives of value creation, capture and the value chain (Magretta, 2002).

Customer Focused Marketing

If one explores the business model concept through the lenses of organization design and strategy, a common theme emerges which may seem at first the core focus of business models. That theme discussed by Chesbrough and Rosenbloom (2002), Amit and Zott (2007), Teece (2010) and others is the concept of value creation. Within work by these authors, the focus on customers and the ability to create value for a customer plays a major role in the delineation of the business model construct. Although most management research on business models does not specifically address the overlap with customer marketing focused research, the emphasis on value creation makes the link critical and important to understand at least at a high level.

As the modern organization developed and industries emerged leading to intense competition, the need to understand customers and how to position a firm clearly against competitors also emerged leading in part to focus on customer based marketing. Whereas in strategy, Porter defines value as "the amount buyers are willing to pay for what a firm provides them measured by total revenue (Porter, 1985: 38)," the concept of value within the customer marketing domain centers on the ability of a firm to satisfy customer wants and needs (Fornell, Johnson, Anderson, Jaesung, & Bryant, 1996). This definition is less focused on revenue generation and more focused on customer perceptions of met expectations. The ability to achieve this concept of value from a customer's perspective is a continually evolving and growing body of research and emphasizes both the overall benefits and costs associated with products and service offered by a firm (Coviello & Brodie, 1998).

The quest to understand customer value is essentially the foundation of customer marketing (Anderson & Narus, 2004). It is widely accepted that for marketing focused efforts, the ability to create customer value is the basis for superior performance (Slater, 1997). However, much of the early work in this domain focused on the alignment between product features and customer desires which is only part of the value creation equation. More recent work has begun focusing on the relationship side of value creation and researchers such as Eggert, Ulaga, and Schultz (2006) have begun focusing on the elements of the supplier customer relationship and the impact these relationships have on the value creation equation. Within the marketing perspective, value creation is the overall ability to provide a product, service, and relationship that brings greater benefit than costs to the customer (Anderson & Narus, 2004).

This foundation contributes to the concept of value creation within business models as one considers the ability to align with customers as key members of the value network in order to provide benefits that exceed costs both from a product or service perspective as well as from a relationship perspective. This idea of relationship value permeates the broader business model discussions as indicated by several of the definitions presented earlier. Throughout the existing body of business model literature, the concept of value creation is prevalent. McGrath (2010) addresses the role of business models in bringing in the customer perspective to be able to create value. Extending this perspective however is the idea that value creation is much more than just the customer understanding and interaction (Shafer, Smith, & Linder, 2005). Value is created throughout the value network and like other foundational concepts discussed, is much broader than the traditional marketing perspectives provide. As with organization design and strategy, customer focused marketing contributes to our current understanding of business models through an extended view of value creation as depicted in Appendix 1-A, yet by itself, it is only partially able to address the explanatory ability of business models.

Business Model Literature Analysis

Organization design, strategy, and customer marketing each provide important elements of understanding when considering business models. Bringing the contributions of these three domains together to better understand the theoretical basis of the key dimensions of business models provides a greater context for creating construct clarity and understanding the holistic nature of business models. Although many authors (i.e. Amit & Zott, 2001; Fetscherin & Knolmayer, 2004; Morris, et al., 2005; Schweizer, 2005; Teece, 2010) have conducted literature reviews to develop definitions of and insights into business models, there remains the need to clarify the theoretically based key elements of the construct in order to understand how the relationships between each of the elements lead to a better understanding of business models. In order to accomplish this task, I followed the review process presented by Haleblian, Devers, McNamara, Carpenter, and Mason (2009), and conducted a systematic review of a broad selection of business model research. I followed five steps in order to manage the broad range of potential articles on the subject. First, I performed a search using Business Source Premier using the word string "Business Model" in abstracts and titles (Stähler, 2002). This produced 9,388 results. Second, in order to focus the search from the broad range of topics and journals I narrowed the list down to academic journals which produced 1349 results. From this search, the third step involved a review of the titles and abstracts yielding a narrowed selection of articles to 224 articles focused on business models within firms found in management, marketing, and MIS as well as leading practitioner journals such as HBR and Sloan Management Review. As my purpose was to focus on top tier journals, I selected those articles published in high quality academic journals. As academic research on business models is newly emerging, there were only a small group of top tier management journals to date with articles published on the topic. The journals included the *Academy of Management Executive*, *Academy of Management Perspectives*, *Strategic Management Journal*, *Journal of Management*, *Entrepreneurship Theory & Practice*, *Organization Science*, *Journal of Marketing*, *Journal of Management Information Systems* and *Long Range Planning*. This selection provided 32 articles which represents the current business model-centered research within the high quality management journals.

Business Model Analysis Results: With this sample, I proceeded to review each of the 32 articles with two main objectives in mind. First was to identify convergent threads within the various definitions and second was to understand the consistency of each of the dimensions within current research. In so doing, I began coding each of the articles by identifying the foundational elements identified previously through my review of the domains of organization design, strategy, and customer marketing. I coded each of the articles' reference to the elements of value creation, value capture, value network, and structure to determine the frequency of each element in top tier management publications as a measure of consistency of acceptance of the central dimensions of business models. The results of this coding process can be found in Appendix 1-B. If an article presented any of the four identified dimensions of a business model, I marked the dimension in the appropriate category. All of the articles had more than one category marked. Upon completion of the coding process, I added up the number of times each of the categories was referenced. This coding process revealed that the four dimensions or elements identified earlier were each present in more than 70% of the articles examined. Elements of structure were found to be present 71% of the time. Not surprisingly, value network which is often closely linked to structure also appeared about 71% of the time. Value capture appeared 84% of the time, and value creation appeared 90% of the time. These results indicate an important element of convergence of the theoretical roots of business models as well as consistency of the core dimensions of the business model construct. The question remains, with the level of consistency surrounding the core dimensions of business models, why does the persistent confusion regarding the nature and distinct domain of business models continue to exist?

Each dimension is important in building a common understanding of business models however each has limitations as well based on their roots within their foundational domains. It may seem that the business model construct is simply the aggregate of these basic dimensions and that creating a definition from these dimensions should lead to a clear understanding of business models. However upon closer examination it is clear that there is more to the business model construct than simply these four dimensions pieced together. The presence of these four dimensions provides a portion of understanding regarding business models, but as Zott et al. (2011) state, there is still a missing element to our ability to understand the broader nature of the construct. Although these four dimensions provide a degree of clarity regarding the make-up of business models, as argued by Zott et al. (2011) the continued focus on these dimensions alone may actually be partially responsible for the continued confusion regarding business models. This confusion stems from the inability of these four dimensions alone to fully explain the construct and its explanatory ability. Looking beyond the commonly identified dimensions of a business model to an understanding of the nature of the combined dimensions can help establish clearer boundary conditions as well as increase understanding regarding the distinct domain of business models.

THE GESTALT OF BUSINESS MODELS

The above analysis above indicates the presence of meaningful consistency surrounding the foundational dimensions of business models. While this is an important contribution, it still does not resolve all of the confusion surrounding the nature of business models. The lack of clarity is evidenced in both review articles on business models calling for further construct clarification (Zott et al., 2011) and the emphasis on attempts to provide new definitions of business models in order to help mitigate the lack of common understanding (George & Bock, 2011; Teece, 2010). Zott el al., in their 2011 review of business model research concluded:

> "Despite the overall surge in the literature on business models, scholars do not agree on what a business model is. We observe that researchers frequently adopt idiosyncratic definitions that fit the purposes of their studies but that are difficult to reconcile with each other. As a result, cumulative progress is hampered. Current research has established the need to continue to move beyond current properties of business model definitions to be able to more clearly understand the broader nature of the construct (Zott, et al., 2011: 1020)."

Whereas definitions are necessary at some level, particularly with early stage research as with business models, continued focus on definitional issues seems to actually limit the progression of the development of business model research. Focus on definitions can help to clarify the dimensions or elements of business models, yet as indicated by Zott et al. (2011) above, definitions alone are not able to clarify the broader nature of the construct and the theoretical basis of the construct as outlined by Dubin (1969). Research needs to be able to understand the theoretical foundations of a construct, work to establish a clearer set of boundary conditions through understanding the relationship between the core elements, and identify distinct explanatory opportunities. The business model construct does indeed have foundational roots in organization design, strategy, and customer marketing but business models can also seem to address elements of a firm's activities beyond the limitations of each individual dimension previously discussed (Amit & Zott, 2001; Magretta, 2002; McGrath, 2010). It is evident that a common understanding remains an important gap leading to the continued need to be able to identify the distinct domain of business models. The four individual contributions of structure, value creation, value capture, and the value network do not fully explain the construct. Thus, I argue that business models are more than simply the combination of the four dimensions contributed by organization design, strategy, and marketing.

Drawing on the early work of Wertheimer (1938), I utilize gestalt theory to help further our understanding of the business model construct. Rather than the whole being determined by the presence of the individual elements, gestalt theory suggests that the individual elements gain meaning from being a part of the whole (Wertheimer, 1944). This is more than simply the whole being greater than the sum of the parts. It states that when individual dimensions of a construct are combined, there is an additional unique property that emerges. This new unique property is only visible when the individual dimensions are considered as a whole (Wertheimer, 1944). Ambiguity involving complex constructs can often arise from attempts to understand only the individual elements of the construct, and not how the various components fit together as individual parts to make a whole (Rindova, Ferrier, & Wiltbank, 2010).

Gestalt properties are those that rely on the relationship that exists when individual elements are combined and helping to establish an understanding of the whole which is not able to be derived by examining the individual components alone (Kimchi, 1992). Consider the following example of Ehrenfel (1988) to help explain the concept of gestalt: If a musician plays a melody comprised of 6 tones and then plays the same melody comprised of 6 different tones, the listener would be able to identify the melody in both instances. Likewise if a musician plays the 6 original tones in a different combination, the tones stay the same but the melody is now different. There is evidently something beyond simply compiling the 6 individual tones which makes up the melody. It is this additional property of the gestalt of the melody which transforms the 6 individual tones into a recognizable melody, even when the specific tones may change. The relationship between the tones once combined creates a unique property which is the melody. The melody is clear once the individual tones are combined, but is not present alone in the tones when considered individually. This is an important element of the gestalt nature of business models as a means to help answer the call from above by Zott et al. (2011). Just as it is very difficult to identify the melody from the individual musical tones, focus on the individual dimensions of a business model rather than the combined whole will fail to yield the gestalt property of business models. This amplifies the challenge of current research to be able to develop understanding of the broader nature of business models.

Reconsidering the review of business model literature discussed earlier in this paper suggests the existence of the gestalt nature of business models. It is evident that the individual dimensions of structure, value creation, value capture, and the value network are recognized as key components of a business model within the current research with great consistency. However, even with the identification of the four dimensions from our review, the continued call for clarification and new understanding of business models indicates that something is still missing. As Zott et al. (2011) point out, there remains confusion as to what actually a business model is and more specifically, as to the broader nature and explanatory ability of business models. It is often impossible to understand complex constructs when focusing on each individual element of the construct due to the insights which come from understanding the elements in combination (Dubin, 1969). It is essential to understand not only the individual elements but the relationships between them. Continued confusion regarding the business model construct may be in large part due to the focus on identifying and understanding these dimensions individually and that when examined as a whole an additional dimension or property of business models becomes visible: opportunity alignment.

Each of the four dimensions identified above is able to provide some understanding into a firm's business model. Current research examines these dimensions while attempting to articulate a depiction of the business model construct. Examples include how to organize in order to create value in unique ways, the ability to understand and create relationships within new or shifting markets, and establishing transactions with existing as well as unique partners (Ilinitch, D'Aveni & Lewin, 1996; Smith, Binns & Tushman, 2010). Additionally, Smith et al. (2010) specifically address how a firm navigates a complex shifting market through the correct structure and position within the value network which can lead to the ability to create and capture value to address the changes brought about within these markets due to continued innovation. Alone we can gain some understanding of the role of each dimension within the venture; however each dimension is not sufficient to illuminate the firm's business model. When examined closely each of the examples above hint at the notion that as the dimensions combine there are interactions which provide greater clarity regarding the ability effectively pursue a new opportunity.

These interactions provide the basis for better understanding the opportunity alignment (gestalt property) of business models. First, consider each dimension alone. Value creation addresses the ability to meet or exceed customer needs or demands (Eggert et al., 2006). Structure focuses on the venture's internal organization to produce an output (Thompson, 1967). Value capture centers on the ability to appropriate the rents from value created, the value chain is simply the series of activities from raw materials to consumers, and the value network is a framework of potential exchange partners (Betz, 2002; McGrath, 2010; Mutaz, Al-Debei & Avison, 2011). Each describes a focused activity or state of the venture but the whole of the venture's business model cannot be identified from them individually or even as an aggregate. When examining the four dimensions once combined with each other, understanding of the broader nature of business models increases. As four combined dimensions, value creation extends to the ability of a venture to provide benefit to all potential exchange partners across a value network and considers a more comprehensive perspective of value. The ability to organize the structure creates the mechanisms for the capture of value throughout the value network not just in the form of rents from customer, but in the form of new relationships, information and learning, and even new opportunities across a single or even multiple value chains. In the combined state, the nature of the value network evolves from a linear depiction of sequential activities to a broader array of partners previously disconnected that can be linked to contribute to both value creation and value capture associated with an opportunity.

Teece (2010) expanded on this notion as he proposed that in the context of a changing market, shifts within the market bring about the possibility to address and ultimately pursue new opportunities in unique ways. It is the role of the business model to provide the framework for a firm to be able to effectively pursue new opportunities associated with changes in the market and to be able to capture the value created through this pursuit as a result. Inherent in the framework discussed by Teece and others is the presence of the individual dimensions of business models (structure, value creation, value capture and value network) which actually when combined together lead to the ability to identify an additional dimension. This new fifth dimension is focused being able to effectively pursue new opportunities that the four individual dimensions are unable to accomplish alone (George & Bock, 2011; McGrath, 2010; Teece, 2010). Teece discusses this combination of dimensions to pursue a new opportunity as an architectural rendering. Within the architectural drawing, the individual building materials are combined together and when combined generate a new outcome which is a new building. Much like an architectural drawing, the combination of the dimensions of the business model leads to a clearer picture of the whole. As the dimensions combine, they provide understanding of an additional property of business models which focuses on being able to effectively pursue new opportunities. I propose that through the lens of gestalt theory, the interactions of value creation, structure, value network, and value capture lead to a fifth dimension of business models which I label as opportunity alignment. Whereas current literature focuses primarily on the four previously identified dimensions, the continued lack of clarity regarding business models partially stems from not understanding this fifth dimension. Gestalt theory provides insight into the broader nature of business models and understanding of the five instead of four dimensions which make up business models.

Opportunity alignment incorporates several aspects of a venture's pursuit of a new opportunity due to the combined dimensions identified above. The venture's structure connects to the value network to more clearly articulate the venture's links with exchange each partner. As value creation, structure, value network, and value capture come together as part of the business model they lead to the ability to more clearly understand the more favorable path to follow when pursuing an opportunity. Understanding the value that can be created is clearer when combined with the structure of the venture and the entire value network. Value capture encompasses the value created across the entire value network and the structure considers not only internal coordination of resources but the critical links to potential partners across the value network in order to create value. These interactions provide a broader perspective of the dynamic nature of business models as well as the uniqueness of each business model. The nature of the relationship of each dimension with the others creates a unique context and thus a unique element of opportunity alignment. As one dimension changes, the alignment of the opportunity will also change creating the need for further adjustments and pivots. However if one or more of the four dimensions is not clearly defined or understood, the more favorable path of opportunity pursuit may also be more difficult to understand. As a stand-alone term, alignment means the ability to coordinate or connect parts in relation to a common goal. In this context, opportunity alignment can thus be defined as the connection or coordination of structure, value creation, value capture, and value networks in order to effectively engage in the entrepreneurial enactment process.

Evident in this description of opportunity alignment is the dynamic nature of the dimension. This dynamic component of opportunity alignment provides greater clarity in the existing debate of whether or not business models are a static framework or a dynamic process. Business models when considered through the lens of gestalt theory provide a link to addressing both perspectives. There is a static model based element of business models which is most commonly explained through understanding the dimensions of structure, value creation, value capture, and value network. These provide insight into the framework of the business model, or the architectural aspect of business models (Teece, 2010). Additionally when the gestalt property of business models, opportunity alignment, is considered, a dynamic element is introduced. This dynamic element of business models addresses both an external and an internal perspective. Opportunity alignment, in part, addresses the ability of a business model to adjust or pivot based on changes in the market as discussed by George and Bock (2011). At this level, this is similar to the description of dynamic capabilities as posited by Eisenhardt and Martin (2000). Teece (2007) discusses the role of dynamic capabilities as a resource that a firm uses to implement its business model in the face of changing opportunities or market conditions, again pointing to the dynamic nature of opportunity alignment with an external focus.

However, opportunity alignment goes beyond the traditional definitions of dynamic capabilities as it addresses the internal coordination between key elements of a new venture. In this case, the dynamism of opportunity alignment is more specifically focused on internal coordination even in the pursuit of a stable or non-changing opportunity. It is clearly possible that an opportunity has been found and is relatively stable in the market and the dimension of opportunity alignment is the dynamic process of internally focused changes to be best able to pursue the opportunity as the opportunity becomes more understood. Where opportunity alignment can be a type of dynamic capability it extends beyond the pure dynamic capabilities literature.

This is best seen when considering real world scenarios of entrepreneurs pursuing new opportunities. Consider a team of entrepreneurs who were attempting to commercialize a new bio-fuel focused on generating fuel for heat. As they developed the technology and considered the possible markets and opportunities, they began presenting their plan to others in attempts to begin the commercialization process. In discussing their concept and business model with industry experts, potential customers and potential investors, they received feedback that their initial target of the home heating market was going to be problematic because of distribution and seasonality challenges. Consequently, they reconsidered their business model and ended up readjusting their distribution and customer marketing to be more in line with the true nature of the opportunity indicating the dynamic nature of business models. In this case the dynamism was more about gaining critical understanding and coordinating a new venture to be able to pursue a relative stable opportunity incorporating both an external focus and an internal focus.

Such realignments are actually a common occurrence with entrepreneurial endeavors and can be easily understood when considering the gestalt nature of business models. If there is a gap in understanding of any of the four foundational dimensions of a venture's business model, the gestalt property of opportunity alignment will reflect the same gap in the business model framework. Additionally, opportunity alignment can actually help expose potential flaws in a new venture's plan and provide a clearer path for how to address potential opportunities. If the potential for value creation is not understood across the entire value network and a venture only focuses on the customers, the gestalt property will also only take into account alignment from the customer's perspective and miss the potential for value creation and alignment with a broader set of exchange partners within the value network. This example is depicted in the differences between Google and other early search engines. Value creation and value capture were not clearly defined across the entire value network by Google's early competitors which caused very different perspectives of effective opportunity alignment between each company. Each venture's business model contained elements of value creation, structure, value capture (although in varying degrees), and value network, yielding a framework for opportunity alignment which yielded very different paths for opportunity pursuit and thus contributed to the differences in outcome and Google's comparative success. Early competitors' business models incorporated the dimensions of value creation and capture from a per user perspective and introduced banner ads as a result. Google articulated value creation and value capture in a much broader sense. For example, they incorporated a unique group of exchange partners leading to a quicker search process, a more focused advertising strategy, and a clearer understanding of how their structure should connect with the value network in order to facilitate the value creation and capture process. This is evidenced in their recent relationships established with partners such as NASA, News Corp, NORAD, and even the Pontifical Council for Social Communications (Lewis, 2005; Krause, 2009). This clearer perspective of each of the four dimensions combined to provide a direct path for effective pursuit of the opportunities at hand, or in other words created an additional dimension of opportunity alignment which helped to contribute to Google not only being the dominant firm in their industry, but in the word Google becoming an official part of common vocabulary meaning to search (Harris, 2006).

It is through understanding the combined nature of the four core dimensions of business models and the alignment that exists within the combined dimensions that research can begin to address the lack of progress cited by Zott et al. (2011) and create a clearer understanding of the broader nature and unique explanatory ability of business models.

DISCUSSION AND FUTURE DIRECTIONS

The rise in business model research over the past 15 years has led researchers to focus on attempts to understand what business models are and how they may provide understanding and insight within management research. Business models are important factors in firm performance (Zott & Amit, 2008), yet a clear understanding of what a business model is and how one works is missing. This paper explores the underlying theoretical foundations of business models as contributed by core domains such as organizational design, strategy, and customer marketing identifying the specific dimensions of each within the business model construct. Further, this paper examines the prevalence of these contributions in current business model research published in high quality management journals. Finally, to address the continued lack of clarity around business models, despite the growing body of research focused on setting forth definitions and identifying common dimensions of the construct, I apply gestalt theory to the business model context. Gestalt theory examines the holistic nature of a complex construct such as business models stating that business models are more than the result of combining together their identified individual dimensions. It is through understanding the relationship that exists between these dimensions when combined that yields a more complete understanding of the broader nature business models and thus the unique explanatory ability of the construct. Current research has primarily focused on the definition and dimensions of business models stopping short of considering the relationship between the dimensions when combined or the gestalt nature of business models: opportunity alignment. Business models as gestalt aides our ability to understand the distinct domain of business models: the pursuit of opportunities which in other words provides insight into the theory of each individual firm. The gestalt property of business models, opportunity alignment, emerges more clearly when the individual dimensions of business models are examined as a combined model. As each dimension is considered in conjunction with each of the other dimensions the relationships between them provide insight into how a venture should best address potential opportunities. As one dimension changes, the approach to pursuing the opportunity also changes to ensure that each dimension is properly developed.

This new dimension of opportunity alignment has important implications on several aspects of business model and entrepreneurship research. First of all is the clearer understanding of the theoretical foundations of business models and their role within entrepreneurship. Traditional research has continued to ask the questions of what is a business model and of whether or not business models are distinct or simply a part of organization design, strategy, or even customer marketing. An examination of these domains clearly identifies key aspects of business models which each domain has contributed. These aspects or dimensions are identified as structure, value creation, value capture, and the value network. These dimensions are important elements of business models and contribute to our understanding of the construct as they provide insight into the architectural framework of a business model (Teece, 2010). These four foundational dimensions are important and are found to be highly consistent in recent research focused on business models. Yet despite the commonality of these four dimensions of business models with the research, there remains a high level of ambiguity regarding understanding what a business model is and how it works.

Additionally, this paper moves beyond definitions and explores not only the four dimensions themselves, but the relationships between those dimensions. It is this process that pushes the field forward in beginning to draw boundary conditions and establish the theoretical viability of business models as a research domain (Dubin, 1969). Through this process, business models are found to indeed be different from core domains such as those listed above. Each of the existing domains contributes to our understanding but each is limited in its ability to address the construct as a whole. Structure, value creation, value capture, and value network provide understanding into the key aspects of a new venture. However when examined individually they do not fully address the questions surrounding business models. This is evidenced in the myriad of articles continuing to address the nature and definition of business models. Each proposes some combination of several or even all of the four dimensions identified in this paper yet each continues to imply there is more to business models. When taken together the dimensions of business models create a clearer picture of how a firm addresses opportunities through understanding the theory of an individual firm. This helps to continue to delineate the focus of business models in addressing new opportunity pursuit. It is the combined nature of the four foundational dimensions leading to the fifth dimension of opportunity alignment which provides additional understanding into the boundary conditions of the construct. Understanding the nature and role of opportunity alignment focuses the business model construct on the ability to better explain how new ventures address new opportunities.

Another impact is the clarification of potential future research streams focused on business models. Initially is the importance of being able to validate the presence of each dimension of business models within new ventures through focus on not only the four dimensions outlined, but on the broader nature of the construct as depicted through the lens of gestalt theory. As discussed earlier, one way to do this is to isolate the context to new ventures and understand the role of each of the four dimensions within a new venture as well as the nature of the four dimensions when combined. Following the lead of Gartner (2007) and others, the narrative or interview process may provide the framework for this type of research. The ability to interview entrepreneurs and have them outline the dimensions of the business models as well as articulate the story of their business will allow for the ability to address the impact of combining the dimensions listed above to engage in the entrepreneurial enactment process (George & Bock, 2011). This will aid in developing construct clarity and in continuing to establish divergent validity. Additionally, it is important to further understand the links between business models and venture growth. Do business model choices impact venture progression? Can business model choices amplify resource strengths and weaknesses or even compensate for a lack of certain types of resources? Finally a potential path for future research is through examining the antecedents of business models. What factors impact the choice of business models and how do business models account for potential weaknesses within new ventures?

This paper puts forth several contributions of note. First of all is a review of the core domains of organization design, strategy, and customer focused marketing in order to provide a clearer picture of the theoretically based contributions of each to our current understanding business models. This review resulted in four clearly articulated dimensions of business models, structure, value creation, value capture and the value network. Additionally this process outlined the contributions as well as the limitations of each of the domain in addressing the business model construct which aides in creating clearer boundary conditions and distinctions between business models and the domains of organization design, strategy, and customer marketing.

This leads to the second contribution of this paper. This study presents a thorough review of current business model research published in high quality management journals in order to understand how the dimensions mentioned above manifest themselves in business model publications. A high level of consistency was found between the contributions of the management domains reviewed and the inclusion of those contributions in the form of dimensions of business models. This indicates that despite the lack of clarity surrounding business models, there are several commonly accepted aspects of the construct. This is important as we attempt to move the field of business model research forward.

An additional contribution is the application of the lens of gestalt theory to business models. There is a high level consistency pertaining to key aspects of business models in current research however common understanding is lacking (Zott et al., 2011). Through this paper I propose that one main reason is the focus on the definition of a business model and each individual dimension of business models. Gestalt theory addresses the need to examine not only the individual dimensions of business models, but the relationships that exist between the dimensions when combined which leads to a broader perspective. The whole is more than the sum of the individual parts. This perspective helps to establish a more holistic view of business models and takes into account the importance of each dimension as well as the limitation of any individual dimension in explaining the composite construct. The result of this application of gestalt theory is the delineation of the distinct focus of business models and thus a broader understanding of the construct. Business models are more than simply a venture's structure, ability to create and capture value and position and relationships within the value network. A business model in this perspective actually becomes the theory of each individual venture or firm. The role of opportunity alignment as the fifth dimension of business models allows each unique venture to address an opportunity creating clarity around the how the venture will be structured, what value the venture brings to market and how they will capture that value as well as a picture of the potential value network the venture will employ to address the opportunity. The role of alignment is to create the right coordination between these four aspects to uniquely allow the venture to pursue the focal opportunity. As each venture is unique and the way each venture approaches the pursuit of a new opportunity is unique, business models become the unique story of each venture.

CONCLUSION

Even as the use of the term business model continues to appear with more and more frequency, the understanding of what a business model is and what a business model actually does seems to vary widely. It is becoming widely accepted that the concept of business models are an important to practitioners as well as a potentially interesting research focus. However there is a lack of clarity regarding not only the nature of business models but the distinctness of the construct. With this in mind, this paper set out to address this issue through an examination of the theoretical foundations of business models, a thorough review of current research on business models, as well as an examination of the gestalt properties of business models providing greater clarity around the nature of business models and how they work within new ventures.

UNDERSTANDING THE NATURE OF BUSINESS MODELS WITHIN NEW VENTURES

ESSAY TWO ABSTRACT

Recent research has identified theoretical foundations of the business model construct. These theoretical foundations are manifest as key foundational dimensions of business models. The dimensions most commonly identified are structure, value creation, value capture, value networks and the more recently identified dimension of opportunity alignment. Through this study, I test the extent to which these five dimensions are found within the business models of actual early stage entrepreneurial ventures. I employ an in-depth case study method to assess and understand the nature of the business models of eight real world ventures. The findings of this study provide evidence of the existence of the five dimensions identified from existing literature as well as yield insights into how each dimension is manifest within and contributes to the overall business model.

Keywords: Business models, new ventures, structure, value creation, value capture, value networks

INTRODUCTION

Opportunities provide the basis for ventures to organize in attempts to create and capture value which will lead to positive venture growth (Shane, 2000). The challenge of opportunity pursuit by a venture involves the need to establish a clear understanding of how a firm will address the opportunity through the choice of an effective business model (George & Bock, 2011; Teece, 2010). Because opportunities are unique to each venture, the business model of choice will likely be unique as well. However, underlying the uniqueness of each business model is a set of common dimensions which make up a business model providing the framework for addressing the opportunity at hand (Rhoads, 2013a).

These commonly identified dimensions of a business model are found in current literature discussing business models. Examples include Amit and Zott's (2001) discussion on business models as "the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities (2001: 511)." Teece (2010) proposed business models as "the logic, data, and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value (Teece, 2010: 179)." Additionally, George and Bock (2011) state that business models express the configuration of organizational elements designed to create value through entrepreneurial enactment activities.

Resident in these various definitions of and studies focused on the nature of business models are a set of commonly identified dimensions underlying each venture's choice of business model. Central to several of the most commonly cited definitions on business models are: (1) a framework of understanding regarding a firm's structure in relation to the pursuit of a new opportunity, (2) the element of value creation associated with the opportunity, (3) the mechanisms for capturing the value created in pursuing the opportunity, and (4) the identification of and alignment with potential exchange partners within the value network to effectively pursue the new opportunity (George & Bock, 2010; Rhoads, 2013a). However, despite the existence of these four dimensions of business models found regularly in current research, there remains a lack of clarity regarding the broader nature of the business model construct (Zott, Amit, & Massa, 2011). Through the lens of gestalt theory in considering business models, a fifth dimension of business models emerges which adds additional insight into the nature of business models and how they work: opportunity alignment (Rhoads, 2013a).

This study employs the use of in-depth case studies wherein I examined the business models of eight early stage entrepreneurial ventures involved in the pursuit of new opportunities. Specifically, I explored the assertions that (1) the four dimensions of business models identified above are central to and commonly found within a venture's business model across ventures and (2) through gestalt theory, the nature of business models is more than simply the combination of the four commonly referenced dimensions identified in existing literature, and includes the dynamic oriented dimension of opportunity alignment.

To accomplish the purposes of this paper, I contend that each of the foundational dimensions is articulated as a key element of a venture's business model. In so doing, I examine how each of the four dimensions of business models combine with each other and whether or not the combined dimensions yield an additional fifth dimension of opportunity alignment using the lens of gestalt theory (Koffka, 1935). I then outline the case study method and sample following Shane (2000). Subsequent to this section, I review the findings of each of the eight cases and discuss the implications of the results. In so doing, this paper will provide a clearer backdrop for understanding the distinct domain of business model research and the specific measurable dimensions of business models adding to the ability to establish both convergent and divergent validity of the business model construct.

THEORY AND PROPOSITIONS

The Nature of Business Models

The focus on business models in both practice and academic research has continued to rise over the past 15 years. As business model research has gained momentum, multiple recent studies have called for the need to better understand the nature of the construct and its domain of distinct explanatory ability (Baden-Fuller & Morgan, 2010; Smith, Binns, & Tushman, 2010; Zott et al., 2011). In addressing these calls, several authors have produced new definitions as an initial step in understanding what makes up the construct. Such definitions include references to the early work of Timmers (1998) which defined business models as "an architecture for product, service and information flows, including a description of the various business actors and their roles (Timmers, 1998: 4)" as well as the definition provided by Chesbrough and Rosenbloom (2002) outlining the framework for combining resources, customers, and markets in order to develop profitable economic outputs.

More recent work published in top management journals combines aspects of these earlier studies and portrays business models as "the content, structure, and governance of transactions" designed so as to create value through the exploitation of business opportunities (Amit & Zott, 2001: 511; Zott & Amit, 2008). Teece (2010) continues the refining of both the nature and domain of business models as he depicts business models as "the logic, data, and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value" while specifically focusing on new opportunities (Teece, 2010: 179). Finally, George and Bock (2011) find that business models express the configuration of organizational elements designed to create value through entrepreneurial enactment whereas strategy is the dynamic set of initiatives and processes that enable the firm to compete in value creation process.

These and other recent studies highlight several key components often found within the definition of business models which aid in clarifying the business model construct. In an in-depth analysis of the 32 articles focused on business models published to date in top quality management journals, four specific commonly referenced dimensions of business models were noted: structure, value creation, value capture, and the venture's value network (Rhoads, 2013a). These dimensions were found to be present in a majority of the articles' delineation of the business model construct. However business model research continues to cite a lack of understanding regarding the nature of business models and a need to move beyond definitions (Zott et al., 2011). Despite the continued lack of clarity surrounding the nature of business models, Rhoads (2013a) found consistency in the most commonly cited components of a venture's business model from a theoretical basis demonstrating a foundation to be able to begin to understand not only the dimensions of business models, but the relationships between those dimensions and the resulting outcome on increasing our understanding of the overall construct. To better understand each of these dimensions and the role they play in understanding the business model construct, I reviewed each dimension individually, identifying the theoretical foundation for each and the contributions and limitations of each in explaining business models, and more importantly, their relationship to each other when combined in the form of a business model (Rhoads, 2013a).

One of the challenges in understanding business models is the current focus by many researchers on established firms as the context within which to examine the construct. As a firm matures, aspects such as business models, strategy, product strategies, and others begin to become entangled making it difficult to understand where one stops and another starts (Yip, 2004). To be able to address each dimension and draw boundary conditions around their use within the context of business models, it is helpful to be able to detangle the presence of these multiple management domains which help explain firm dynamics. One of the most useful ways to accomplish is through a focus on the early stages of a new venture (Casadesus-Masanell & Ricart, 2010; Yip, 2004).

As an entrepreneur moves through the entrepreneurial process from opportunity identification to opportunity pursuit engaging in the entrepreneurial enactment process, the boundary conditions between management research domains are often most distinct (Casadesus-Masanell & Ricart, 2010; McMullen & Shepherd, 2006; George & Bock, 2011). The nascent stage opportunity centric mindset of an entrepreneur may or may not include traditional perspectives of management thinking such as firm level strategy or organization design, "but the firm formation decision is based on the enactment of an opportunity through an explicit or implicit business model. The business model is therefore a core building block of the entrepreneurial enactment process (George & Bock, 2011: 102)." As George and Bock (2010) point out, it is within this early stage of entrepreneurial enactment that one can better examine not only the distinct domain of business models, but also the specific dimensions of business models. It is this early stage that I use as the backdrop for examining in more detail the business model construct.

Proposition Development

Structure: In beginning with structure, it is important to understand both the roots of structure as well as what structure represents when bounded by the business model domain. Structure is based in the research domain of organization design. Traditional perspectives on structure explain the internal coordination of roles and the allocation of resources, responsibilities, and authority in order to maximize output and minimize conflict (Thompson, 1967). As organizations grow and become more complex, the emphasis of structure becomes more important. Structure explains the interpersonal relationships within the organization in order to be able to help delineate the nature of organizations and their internal workings (Scott, 2003). The focus of structure centered research is mainly an internal perspective of the firm. This is an essential paradigm within a more established and mature firm as coordination becomes more and more essential with growth and complexity. However in the early stages of a new venture, as the venture attempts to pursue an opportunity, the traditional assumptions of structure from an organization design perspective face certain limitations. For example, as a nascent venture begins the pursuit of a new opportunity the questions of internal coordination and conflict resolution to achieve superordinate goals are less important due to the limited size and the life cycle stage of the venture. The focus at this stage is on being prepared to be able to acquire and then allocate resources, responsibilities and authority in the pursuit of a new opportunity. Organization design perspectives of structure contribute to our understanding of business models yet alone do not explain the complete basis of structure within the business model.

Within business models, structure addresses not only the allocation of resources, responsibilities and authority and the internal coordination of resources, but it speaks to the external links that must be considered throughout the value network and how a new venture can employ its internal resources to establish those links in order to deliver on a specific value proposition. As Timmers (1998) points out, a business model reflects the operational architecture of a venture in order to align internal functions to external opportunities. The dimension of structure within the business model addresses the delineation of as well as the alignment of internal resources with potential external links that may help a firm effectively address a new opportunity (Betz, 2002). In this context, George and Bock (2011) discuss the structure dimension of business models as the frameworks for how a firm is able to connect with potential exchange partners in a value network in order to generate and capture revenue. A business model includes a representation of the structure of the firm in the context of conducting business with the external environment (Osterwalder, 2004). The basis of these internal resources is often the founding team and the ability of the founding team to facilitate links with potential partners in order to accomplish the goals of the venture (Baum & Locke, 2004; He, 2008). The focus of structure is an important dimension of business models and deals with the internal composition of employees, or the founding team in the case of nascent ventures, as well as the external alignment of people and resources in relation to the necessary or potential linkages with exchanges partners in order to be able to enact the pursuit of a new opportunity (Zott & Amit, 2007). Therefore, it is proposed that structure within the domain of business models includes the allocation of resources, responsibilities and authority, the internal coordination or composition of employees and resources as well as the alignment of the internal structure with potential external exchange partners, leading to the following proposition:

> *Proposition 1: The more complete an entrepreneur's description of his/her business model the more the description will include a discussion of all of elements of the role and nature of structure.*

Value Creation: The second dimension of business models is value creation. The concept of value creation is gaining significance in a variety of research disciplines such as strategy and customer marketing. The key element of value creation in most management perspectives is the ability of a firm to meet or exceed customer needs or demands (Eggert, Ulaga, & Schultz, 2006; Sirmon, Hitt, & Ireland, 2003). Value creation is the ability to marshal internal resources in order to produce a desired output. The focus of value creation in strategy is on a firm's ability to outperform competitors. In marketing, the focus is based on mapping products and services to customer needs or expectations in order to gain market share. These perspectives are also present when dealing with value creation in the context of business models, however in a business model, value creation encompasses additional elements. Within the domain of business models, value creation addresses how the venture creates the platform for generating benefit not solely for customers, but for each potential exchange partner (Zott & Amit, 2007). This includes not only revenue producing output, but in the ability to link elements of a venture's value network in unique ways so as to produce value through the links themselves such as new partners being linked together, unique methods for linking partners, and increased access to information which helps create greater understanding surrounding the pursuit of the opportunity among multiple players within the value network (Amit & Zott, 2001). Within the context of business models, value is determined to be a critical element that can be created at multiple levels across all products and services and across all channels and partners rather than at the individual product or customer level (Alt & Zimmerman, 2001). Downing (2005) discusses this in the context of understanding and acting on the expectations and outcomes that can help a business be successful in its environment. Successful value creation in this instance is the ability to satisfy the needs or demands of a firm's entire value network to ensure continued growth. Therefore value creation in a business model addresses the benefits for customers as well as the benefits for all potential exchange partners across an entire value network leading to the following:

Proposition 2: The more complete an entrepreneur's description of his/her business model the more the description will include a discussion of the role and nature of value creation.

Value Capture: The third dimension of business models is the concept of value capture. Although it is often taken as a given, the ability to capture a portion of the revenue produced from products and services is a unique task of firms unto itself (Chesbrough & Rosenbloom, 2002). Strategy has addressed this concept through resource ownership and questions of rent appropriation. This focus is primarily based on revenues and profits linked to firm resource sets and customers. Although important, this perspective stops short of explicating value capture within the setting of a firm's business model. Business models must include a framework for value capture beyond just the monetary value associated with the strategic focus of the rents based literatures. Betz (2002) discussed the concept of value capture as a model of how a firm increases benefit through activities associated with value creation. Zott and Amit (2008) take the concept of value capture a step farther in considering the ability to capture benefits generated with each potential exchange partner. Where most work on value capture centers around revenues earned from customers for products and services delivered, a business model incorporates the additional elements of capturing the benefits from new or unique linkages across the value network. Possible examples described in the literature include partnerships, learning, innovation, new and unique relationships, or other non-monetary outcomes creating benefit for the partners involved in a venture's network (Schweizer, 2005; Teece, 2010; Zott et al., 2011). Value capture is so important to business models that the lack of value capture mechanisms within a business model has been identified as a significant reason as to why many new ventures fail (Shafer, Smith, & Linder, 2005). This example is made clear in the history of Google as a search engine. Early business model configurations of Google struggled with incorporating value capture as part of the overall business model. Google provided a unique benefit to "customers" through their proprietary search engine yet early on failed to capture the value associated with this service. Unlike many of its early competitors, Google recognized this misalignment and was able to correct it to create a clearly articulated value capture mechanism contributing to early success. Value capture in this case was linked to customer benefit but was actually achieved through understanding how to create and capture value through the connection of previously disconnected exchange partners. Value capture is the mechanism to extract the value associated with each potential exchange created by the venture within the value network. In this light, I propose the following:

> *Proposition 3: The more complete an entrepreneur's description of his/her business model the more the description will include a discussion of the role of and mechanisms for value capture.*

The Value Network: The fourth commonly identified dimension of business models to consider is the concept of a value network. The value network encompasses the network of a broad range of potential exchange partners for a venture (Peppard & Rylander, 2006). A value network includes the traditional elements of a value chain. The idea of a value chain has historically been an important element of multiple management disciplines. Understanding of what a value chain is, how and where to position a firm within a value chain, decisions of vertical integration and diversification, and competitive advantage are some examples of value chain based research. However with the changes in the global business environment, the traditional concept of a value chain is increasingly expanding to include the unique business landscapes and the network characteristics of how a venture actually begins operations. Important catalysts for these changes include the growth of the knowledge market, the development of the internet and e-commerce, outsourcing and offshoring globally, and the interconnectedness of the financial markets around the world (Teece, 2010). Whereas in the past, the value chain was a direct and more linear series of steps associated with producing, packaging, and selling a product, the value network is becoming a more global and broader framework for understanding and linking partners and stakeholders that were previously not connected in the pursuit of value creation and capture (Teece, 2010). Today, understanding the value network within business models encompasses a complex web of exchange partners providing the basis for new opportunities and thus new business models for both existing firms and new ventures. In the context of business models, a value network is a critical component providing understanding for how to pursue a new opportunity (Mutaz, Al-Debei & Avison, 2011; Gambardella & McGahan, 2010). As in the case of the Google business model example, the ability to understand the potential exchange partners and how they link together to create an opportunity is the basis of the value network. Google's ability to link advertisers with previously non-accessible customers through their search engine exemplifies the necessity of understanding the value network of a business model. Business models include a framework for identifying links to outside partners to be better positioned to act on a new opportunity (Casadesus-Masanell & Ricart, 2010; Shafer, Smith, & Linder, 2005). Accordingly, I propose the following:

> *Proposition 4: The more complete an entrepreneur's description of his/her business model the more the description will discuss to the identification and role of potential exchange partners as part of the venture's value network.*

Opportunity Alignment: One important step in continuing to establish construct clarity is the ability to clearly delineate the individual dimensions or elements which make up the construct. However, as is the case with business models, defining the construct and identifying the individual dimensions alone are not enough to establish construct clarity. When examining a complex construct such as business models, ambiguity can often arise from attempts to understand only individual elements of the construct, and not how the various components fit together as individual parts to make a whole (Rindova, Ferrier, & Wiltbank, 2010). Applying early work on gestalt theory, can add greater understanding to such constructs. It is proposed herein that business models are not only made up of the four individual dimensions previously identified, but once combined, the relationships between the four dimensions create an additional gestalt property labeled as opportunity alignment. A gestalt is a composite concept wherein the whole is not determined by the presence of the individual elements but rather the individual elements gain meaning from being a part of the whole (Wertheimer, 1944). This states that determining the broader nature of a business model cannot be accomplished by understanding the four individual dimensions alone.

Further gestalt theory states that the combination of the four dimensions of business models will in fact create the presence of a new and unique dimension. This dimension is only visible when the four individual dimensions are considered as a whole (Wertheimer, 1944). It is this lens that helps explain why there are myriad publications continuing to attempt to define and clarify the business model construct. Understanding the gestalt nature of business models helps to explain why even with such high consistency in top tier research regarding the basic elements of business models there continues to be a recognized lack of clarity regarding the nature of business models and a significant need to move beyond identifying the elements of various definitions of business models (Zott et al., 2011).

Gestalt theory illustrates how each venture can have a different business model even when built on the same four dimensions. It is the gestalt nature of business models that explains how when the four foundational dimensions are combined a new dimension is created helping to clarify the broad nature of the construct and its explanatory ability. In the previous sections of this paper, I highlighted the individual composition of the each of the four dimensions and how each contributes to a business model. It is also important to consider the impact of combining the four dimensions in order to understand opportunity alignment as part of a venture's business model.

Teece (2010) touched on this idea as he pointed to the essential role business models play in a venture being able to pursue an opportunity in a dynamic and innovation oriented environment. A clearly articulated business model allows a venture to better position itself to pursue a unique opportunity. George and Bock (2010) explicitly point out that business models provide a framework for entrepreneurial enactment of an opportunity. However, structure, value creation, value capture, and value network individually contribute to but do not fully explain the ability of a venture to effectively pursue an opportunity. There is additional clarity into understanding the business model when the individual dimensions are considered as a combined whole.

As a single dimension of a business model, structure defines the internal composition of resources as well as the nature of the potential linkages with external exchange partners. Value creation addresses the benefits established to meet or exceed customer expectations as well as with each potential exchange partner. Value capture explores the mechanisms in place to appropriate the benefits created with each potential exchange partner. And finally, the value network identifies the list of potential exchange partners a venture might engage with to pursue the opportunity. It is clear that alone each dimension provides an element of understanding regarding the venture's business model but yet does not provide full understanding. Likewise simply adding up the contributions of each dimension creates only part of the picture of the business model.

Through the gestalt lens of business models, it is upon examining the dimensions as a combined whole which adds yet another level of understanding. As each dimension of a business model comes together, it is proposed that the connections between each dimension yield the additional dimension of opportunity alignment. The venture's structure connects to the value network to articulate the venture's links with each exchange partner more clearly. Adding in the role of value creation, creates greater understanding into what value can be created and how the venture should link with identified exchange partners to effectively pursue a new opportunity. Additionally, the dimension of value capture provides greater insight into the specific nature of the links between the venture and its exchange partners and how each link contributes to the venture's ability to pursue the new opportunity in a viable manner. It is in this combined perspective that the fifth dimension of opportunity alignment becomes more clearly visible. As a stand-alone term, alignment means the ability to coordinate or connect parts in relation to a common goal. In this context, opportunity alignment can thus be defined as the connection or coordination of structure, value creation, value capture, and value networks in order to effectively engage in the entrepreneurial enactment process (George & Bock, 2010; Rhoads, 2013a).

Proposition 5: The more complete an entrepreneur's description of his/her business model the more the description will include a discussion of all of the elements of and the role of opportunity alignment.

Gestalt theory, and therefore the identification of opportunity alignment as a key fifth dimension of business models also helps to explain the role of pivots within the business model context. Pivots are changes made to a venture's business model based on some potential misalignment that is identified. These changes can occur because of increased understanding regarding the market or the opportunity, changes in the environment, or changes internal to the venture. In each situation, the changes will lead to a change in the opportunity alignment and result in the need to adjust the business model or to pivot to be able to pursue the new opportunities in an effective manner. This reflects the dynamic nature of opportunity alignment and thus the dynamic nature of business models and can be important in the ability of a new venture to survive during the startup phase (Sanchez & Ricart, 2010). As changes, whether external or internal occur, the ability to realign the venture with the newly changed landscape is essential as a new venture pursues opportunities (Demil & Lecocq, 2010; Smith, Binns, & Tushman, 2010). The ability to be properly aligned to pursue an opportunity or to be able to adjust to realign to accommodate changes is a central role of the fifth dimension of business models: opportunity alignment. When examining the relationships between each of the foundational dimensions, it is proposed that as the nature of one of the dimensions changes, the nature of the relationship will change creating a change in the dimension of opportunity alignment thus leading to a pivot in the venture's business model. Demil and Lecocq (2010) referenced this concept as they examined the need for a venture to be able to refine or adjust its business model in order to be able to compete in a dynamic environment. Therefore, it is important to not only understand each of the foundational dimensions of business models, but how those dimensions combine together to effectively pursue an opportunity even as changes occur, leading to the following proposition:

> *Proposition 6: The more complete an entrepreneur's description of his/her business model the more the description will include a discussion of how the business model changed in response to internal and external changes.*

METHODS AND DATA

Research Design

This paper provides a synthesis of the results of an in depth case study of eight early stage entrepreneurs engaging in the process of new venture startup. A case study design was chosen as a method of research to allow for the unique opportunity to understand the dimensions of real business models. Additionally, this method provides the ability to observe the presence of the gestalt property of each business model and the dynamic natures of business models resulting from changes in the various dimensions in order to maintain alignment with the focal opportunity of the venture. Studying the process of early stage startups within real world experiences is important especially within entrepreneurship centered research (Shane, 2000). This context creates the potential to more clearly understand the unique dimensions of business models across industries and entrepreneurs and to provide a basis for future empirical examination of the business model construct (Eisenhardt, 1989; Shane, 2000; Yin, 2003). The case study approach is supported with additional sources of data such as business plans, marketing strategies, web sites, and other available archival documents to provide a variety of data sources to help triangulate the findings of the case studies and assist in establishing the reliability of the findings (Eisenhardt, 1989; Yin, 1984).

Procedure. In the process of conducting this study, I used a case study design to better understand the presence of each unique dimension in a venture's business model. Each case study involved a set of field interviews with entrepreneurs. Following Shane (2000), the interviews were setup to be semi-structured interviews to last between one and two hours. The interviews were constructed to assess the presence of each dimension as part of the venture's business model. The questions were constructed based on each of the six propositions outlined above. A list of the interview questions is included as an appendix (see Appendix 2-A). Each interview began with questions aimed at understanding the specific dimensions of the chosen business model followed by the opportunity to "tell the story" of their venture and business model and a discussion centered on the pivots or changes made to date and causes for each change to the business model.

Following Yin (1984, 2003) I developed a case study protocol and database to establish the reliability of the case study data collection process so that each data collection effort can be repeated with the same or similar results (Shane, 2000). The case study protocol (see Appendix 2-B for a general version of the case study protocol) includes a set of “table shells” to help maintain consistency on how the data would be both recorded and used in the analysis (Miles & Huberman, 1984; Yin, 2009). The protocol outline and shells ensure that the data to be collected were focused on the dimensions of business models and the components of each of the dimensions. Following Shane (2000) and Yin (2003), construct validity was established by using multiple sources of data as well as by having a set of experienced advisors review the case study protocol and completed table shells.

As outlined in the case study protocol, the data from the interviews was analyzed using the table shells and compared to the six propositions in order to determine the degree of consistency between the propositions and the interview data. This was done following the pattern of matching logic recommended by Miles and Huberman (1984) and following Shane (2000) in the use of case study design. Additionally following Yin (1984) the data was compared to potential alternative explanations to help ensure the validity of the matching of data and focal propositions. In case study research, propositions are supported when the pieces of evidence from the data collected are consistent with the focal proposition and not consistent with potential rival or alternative explanations (Shane, 2000).

When using qualitative case study research, the ability to validate findings through additional sources of information is important to help establish reliability of the analysis (Yin, 1984). In this light, I also used business plans, web sites, marketing material, and other available archival information for each venture to add to the interview findings and help generalize the overall findings. Each supporting document was coded to help identify each of the four dimensions of the venture's business model. The coding incorporated items adapted from existing measures created by Zott and Amit (2007) assessing the dimensions of structure value creation, value capture, and value networks as well as the questions developed as part of this study which focused on opportunity alignment. Examples of the measures used to code the supporting materials include: 1) The roles of each employee within the venture are clearly articulated, 2) The business model offers new combinations of products, services and information, and 3) The business model brings together new participants. A complete list of the measures is included in Appendix 2-C.

The measures and interview questions were developed with the help of experts in academic research as well as practicing entrepreneurs and tested with a small sample of entrepreneurs to help establish their validity. Initially, interview questions were developed based on the propositions outlined above. Each question was then presented to a group of academic research experts to ensure face validity. The feedback was incorporated and the process repeated. This was then followed by a test of the questions and measures using a group 10 practicing entrepreneurs. The entrepreneurs were presented the questions and measures and their feedback was then incorporated and the final questions were sent to the original team of research experts for final approval.

Sample. The challenge in most entrepreneurship research is the ability to gain access to ventures or entrepreneurs that are involved in the startup process. The ability to gain access to real life data at the startup phase can yield significant understanding and insights and can provide a fertile opportunity for field based case study research (Yin, 2003). A sample was selected from a database of technology-based ventures and the archival records provided by the public database, Silicon Slopes located in the intermountain west region of the United States. Overall, the potential sample pool included data on technology-based ventures from 24 6-digit NAICS with the largest groupings in NAICS 519130 (internet-based ventures—14 observations) and NAICS 541711(biotech ventures—12 observations). The age of the firms ranged from 12 months to 84 months. Additionally, selection was based on the availability of supporting documents which provided information regarding the dimensions of each venture's business model. Such documents included each venture's business plan(s), marketing plans and web sites which outlined in some aspect the venture's structure, value creation and capture mechanisms, along with identification of the proposed value network. This process of using supporting documents to provide a variety of data sources as a way to triangulate the findings of the case studies is an important step in helping establish the reliability of the findings (Eisenhardt, 1989; Yin, 1984).

Based on this information, the following criteria were used to select study participants: 1) Ventures must be at the point of generating revenue as a business 2) Ventures should not be more than 84 months old following Zott and Amit (2007) and Headd (2003) 3) Each venture should provide access to at least 2 of the above listed supporting documents 4) The venture should still be a functioning venture. In selecting a potential sample for this study, an email invitation to participate in a series of interviews focused on understanding the role of business models within their venture was sent to a group of 231 entrepreneurs gathered from a public registry of new or recently started businesses in the intermountain region of the United States. From this initial email, 27 responses were received which met the criteria for selection listed above. The final sample of eight entrepreneurial ventures was selected from this pool of 27 possible candidates based on their actual availability to participate in the study and on a first come first serve basis. The eight entrepreneurial ventures that were selected were contacted to explain the process and requirements of the study in order to confirm participation. The names of each venture and founder have been changed to ensure anonymity. Table 2 below contains a brief overview of each of the eight ventures included in this study.

TABLE 2

OVERVIEW OF VENTURE PARTICIPANTS

Venture Name	Venture Overview	Venture Age and Size	5 Year Goals
MediPro1	Medical devices company founded to focus on one-stop service for all prosthetic and orthotic needs.	Founded in 2009. Currently employees 12 full time staff and 3 licensed therapists/engineers.	$7 M
Phogentrix	On-line photo creation and sharing application. Software developed to increase speed and efficiency of photo altering and sharing.	Founded 2012. Currently staffed by founder and 1 employee.	$3.5 M

Detoxgenix	Health care system developed to increase overall human immune system and deal with increased toxins within the body.	Founded in 2011. Currently staffed by founder and 2 full time employees.	$1.5 M
UVSoft	Software application developed to increase the ability of aspiring musicians to create and share original musical compositions based on genre.	Founded in 2010. Currently staffed by 4 founders.	$2 M
Digisurance	Full service insurance organization developed using on-line application to link agents, customers, underwriters, and down-stream partners in order to facilitate small business and individual insurance needs.	Founded 2005. Currently staffed by 2 founders and 27 full time employees.	$11 M
FishTank	CRM interface tool developed to link marketing and sales initiatives focused on mid-sized business opportunities.	Founded in 2009. Currently staffed by 2 founders and 22 full time staff.	$23 M
RyallProp	Real estate development firm focusing on linking vacation properties on a national network in order leverage marketing, infrastructure, and development to create high end destination resorts.	Founded in 2006. Currently staffed by founder and 58 full time employees.	$33 M
ASCENT	Specialized fitness training using app based systems to focus on each athlete	Founded in 2010. Currently staffed by founder and 3employees.	$4.5 M

RESULTS

As a setup for each interview, the initial question asked was based on having the participating entrepreneurs describe their business model and outline the components of their business models. In this initial question, a clearer understanding of the nature of the business model as developed and employed by each venture was gained. Although each venture had a unique process of describing their venture's business model, common themes were clearly evident and provided the basis for further examination of each of the propositions discussed above.

Proposition 1: The presence and role of structure. The structure of a new venture is often a central point for entrepreneurs to consider given the nature of the startup process. The startup process or entrepreneurial enactment process is a set of activities engaged in by proposed founders to pursue new opportunities (George & Bock, 2011). This set of activities is the basis for how and why the venture's internal employees, or in the context of early stage ventures, the founding team, links to potential exchange partners. Therefore I proposed that structure will be a key element of an entrepreneur's business model and this concept is reflected in the comments of the founder of Fishtank: *"The first thing we did when we began to develop our business model was to consider who was currently part of the business or could potentially be added to ensure the highest chance of success."* Fishtank continued their discussion on this topic by sharing how the ability to have the "right" people within the venture and the ability of the "right" people to connect with potential partners and customers is what drove their "highest chance of success." A focus on being able to identify the right human resources and how those resources, the founding team and employees, could link the venture with its value network was a clearly detailed focus for Fishtank. This type of comment was a commonly identified theme in each of the eight ventures and indicates the important role of structure as a dimension of business models. Table 3 below provides a summary of each of the participants and their perspectives on structure as a component of their business model.

TABLE 3

STRUCTURE WITHIN BUSINESS MODELS

Company	Select examples of descriptions of the role of structure within the business model
MediPro1	“I had to determine what the real nature of my opportunity was with this business and then figure out who I needed to have in place to be able to win.”
Phogentrix	“My first priority was to make sure that I could handle all of the technological requirements of my idea and if not, who I needed to have on board to help.”
Detoxgenix	“I was not a scientist, so I had to ensure that I had access to people who could fill that need and make sure all areas were covered.”
UVSoft	“I had the initial idea but I didn’t have the programming experience or capital so in order for my business model to work, I had to bring on several other people to be able to bring all the different aspects of this idea to life.”
Digisurance	“I spent quite a bit of time finding the right partner and then figuring out what else we needed to do.”
FishTank	“This business was built on having the right knowledge and people to make connections between organizations.”

RyallProp	"My business has a national focus and a very specific group of customers. I had to be able to have a solid group of employees in place to help make sure we could link across the country without dropping the ball."
ASCENT	"I knew the market and the need, so I was the right person to do it. I did gather help from others to make sure this was right, but I just needed to know what I could do and do it."

As each entrepreneur discussed the components of the business model, the ability to make sure the right people were in place was highlighted. Additionally, each entrepreneur was asked a question regarding the team they chose and the relationship between the team and the ability to achieve success as a new business. As indicated in the table above each venture directly linked their team to how they were able to fit within their value network and ultimately achieve the desired success of the business. In each case, the founding team or employees were identified as one of the most important internal resources for the venture. Additionally, each venture stated that it was this internal team that was a critical link between the venture and its potential partners and customers which ultimately impacted their potential for success. This was clearly articulated by the founder of MediPro1:

> *"The most important element of my business is my team. Without the right team, we could not begin to address all of the aspects of our business that ultimately set us apart with both the customers and the hospitals. My first focus was my team."*

Although these entrepreneurs did not speak directly to such ideas as power, authority and coordination resident in traditional organization design theories, they did directly discuss the importance of their human resources and how they were key components to the way the venture interacted with other key players in their markets, providing partial support for the first proposition regarding structure. The component of internal coordination of resources was not specifically addressed by participants in this study. This omission may be linked to the differences in the life cycles of new ventures and more established firms and may be a point of opportunity for future research. These findings were supported by each venture's supporting documentation, where emphasis was placed on identifying the founding team and their links to the venture's value network.

Proposition 2: The nature and role of value creation. The ability to create value is a central tenant in current business model literature. It is often cited as one of the most common elements of a business model and is regularly linked to the potential to achieve success (Amit & Zott, 2001; McGrath, 2010). During the course of the interviews, the concept of value creation was manifest in a variety of ways including discussions focusing on customers, the importance of service and the ease of use of products and services to enhance customer and partner relationships. An example is found in this excerpt from the interview with the founder of MediPro1 as he discussed how important value creation above and beyond revenue from patients is to his business model:

> *"We value our patients and referral doctors and hospitals and will do everything in our power to make sure they feel the value we can bring to them. Our ability to do this is resident in our team and so it is important that they also feel that they are a part of the value equation."*

Table 4 below provides additional select examples of the importance of value creation and capture as key dimensions of a venture's business model.

TABLE 4

VALUE CREATION WITHIN BUSINESS MODELS

Company	Select examples of descriptions of the role of value creation within the business model
Detoxgenix	"My whole business model rests on the ability to link experts, customers, and our business. We focus on how we can make those links beneficial for all of us and have put a process in place to be able to make sales as a part of this process."
Digisurance	"Our value is built on service. If we can service agents, underwriters, and customers, we can turn that into dollars. Once we can do this once, it makes our business stronger long term because of the residual aspect of our model."
RyallProp	"We cater to the rich and so everything we do must be world-class. That is important to our customers as well as our partners and is the essence of how we create value."
ASCENT	"I have found that the key to growth is simplicity and so we focus on the ability to make our process easy to use with predictable outcomes. Our customers now come to expect it and it is what brings them and their friends back. We can easily track fitness improvement and this is the ultimate measure of value in our business."

Although value creation was discussed by each entrepreneur in one form or another, the extent of value creation across the value network varied. One insight through these interviews was the realization by several of the entrepreneurs, as the interviews progressed, of how important value creation is within their business model and how under developed their value creation efforts were at the time of the interviews. As a follow up to these interviews, I have had the opportunity to meet again with three of the entrepreneurs in the study and each of them has made a point of sharing how they are expanding their own perspectives of value creation and how they can expand that part of their business model to include a wider variety of activities throughout their business both internally and externally. The interviews have provided evidence to the notion that value creation is in fact an important dimension within a new venture's business model. Additionally each business plan evaluated attempted to clearly articulate the value creation potential of the business across the value network. In three of the eight ventures assessed, value creation focused on the primary benefits for customers and mechanisms for capturing revenue. Even so, within those three ventures, the interviews exhibited a broader understanding of the concept of value creation and the need to link and provide benefit across the value networks. Overall, the interviews and data provided evidence supporting proposition two.

Proposition 3: Value Capture. Normally linked with value creation is the concept of value capture or the ability to appropriate the value derived from a venture's activities or relationships. When discussing the role of value creation within the business model most entrepreneurs immediately discussed what mechanisms were put in place to be able to capture the value. Often the mechanisms focused on the ability to collect revenues as a result of products and services but in several instances, entrepreneurs also discussed the importance of working with suppliers or possible partners and being able to find ways to leverage those relationships for the long-term success of the venture. This was manifest by the founder of Fishtank as he discussed the importance of relationships in their business.

> *"We know that relationships drive our business and not just the relationships with potential customers. We have to build and maintain relationships with integration partners, content providers, and engineers so that we can stay ahead of the curve. Because of this, we have to think*

about how we make those relationships beneficial for everyone, which will in turn lead to our chances of success."

The key element in this quote for Fishtank is the ability to make each relationship a platform for achieving success which rests on the ability to capture the value created. Additional examples of the importance of value capture within new ventures is manifest within Table 5 below.

TABLE 5

VALUE CAPTURE WITHIN BUSINESS MODELS

Company	Select examples of descriptions of the role of value capture within the business model
Phogentrix	"I know what value is for our customers and how to charge them for that value, but it is difficult in this market to do it effectively. I am working on how to make this work which alone will help me stand out."
Detoxgenix	"One key to our business is trying to figure out how to capitalize on the relationships we have. For every relationship, we try and put a process in place to be able to benefit and help make sales as a part of this process."
RyallProp	"When we provide the right level of service, we create the ability to turn our customers into lifetime friends and this makes us successful which drives our ability to continue to grow."
ASCENT	"Once we know what we can do for a customer, we have a variety of options they can choose which gets them going and rewards us for it."

Within these quotes, not only is the concept of value capture discussed, but the links to value creation are also displayed. This brings forth an interesting component of value capture and its relationship to value creation. Although distinct dimensions, they appear to be related so that value creation can exist without value capture but value capture cannot exist without value creation.

Proposition 4: The value network. As entrepreneurs work to develop their business models, one of the most important elements of the model is the understanding of the variety of potential exchange partners that can help the venture achieve success (Demil & Lecocq, 2010; Zott & Amit, 2007). A value network extends the venture's ability to reach the right customers, often in innovative ways or through the use of unique exchange partners. As each entrepreneur discussed their business model, the recognition that they could not do it alone was evident. Each venture highlighted specific partners that were needed to be able to effectively pursue their focal opportunity. The interviews elaborated on suppliers, customers and partners. In most cases the identified exchange partners were very predictable and part of the logical set of activities within their value chain. However in a few cases the concept of the value network was well discussed and exhibited a broader perspective as seen by the comments from the founder of ASCENT:

> *"Personal fitness is everywhere and is becoming very commoditized. I knew this was the case, and so I had to expand my ability to stand out. I created relationships with universities, local corporations, and professional athlete agencies. As a result, I have been able to gain sponsorship from a large local university. I have also been able to locate my facility inside a large local business that is trying to build a culture of health and fitness among its employees. I work with a lot of different groups to gain traction and spread the news about ASCENT whereas most of my competition focuses on gyms and regional combine camps."*

This example highlights the benefit of a strong network within the business model. As each venture addressed the environment within which it operated, the ability to establish and maintain the right external relationships was identified. Table 6 below highlights examples of such responses and builds on the quote above by the founder of ASCENT.

TABLE 6

VALUE NETWORKS WITHIN BUSINESS MODELS

Company	Select examples of descriptions of the role of the value network within the business model
MediPro1	"My business is pretty much based on relationships with different groups. I try and work with hospitals, product suppliers, insurance groups, disability groups and any other group we can find that might help us meet new patients."
Phogentrix	"Our biggest relationships are with potential advertisers. They provide the ability to be an on-line site. Next I try and work with other on-line providers like some of the newer social network sites."
Detoxgenix	"My whole business model rests on the ability to link experts, customers, and our business."
UVSoft	"With music as our business, we should be able to make connections in any area we want, we just need to decide where we want to focus."
Digisurance	"Early on I set up relationships with all the regular groups like health care groups, auto body shops and others. I probably need to look at other groups we haven't considered yet."
RyallProp	"Relationships are priority one. We are basically a network company and so we always have to make sure we have the right relationships in place and that they are working."

Each of the ventures highlighted several potential exchange partners as a key dimension of their business model yet this dimension, as was seen in the dimension of value creation, has the ability to be expanded in many of the ventures creating further impact on the potential for new venture success. As several of the interviews progressed, participants noticed the importance of a broad network and the potential to expand their own networks to enhance the value of their own business models. This was reflected in the comment by the founder of UVSoft as he recognized the limitations of his own value network:

> *"We have been so focused on finding the right programming expertise and capital that most of my network deals with those two issues. I need to think broader about who can be a potential resource as we build this platform. Music touches everyone is some way and so we should be able to be very creative about how we move forward."*

Although several of the study participants realized that establishing a strong value network was an opportunity to improve their business models, each also identified the importance of their current external relationships which was clearly articulated in each of the venture's supporting documents. The interviews clearly indicated the presence of a value network as a key dimension of each venture's business model providing support for proposition four.

Propositions 5 and 6: The presence and nature of opportunity alignment. Opportunity alignment is an emerging concept focusing on the gestalt nature of business models (Rhoads, 2013a). The ability to articulate clearly the dimensions of structure, value creation, value capture, and the value network outline the blueprint or framework of a business model at a given point in time (Demil & Lecocq, 2010). However it is the ability of these dimensions to combine in an effective manner to pursue a new opportunity and provide the flexibility to change as appropriate that makes the business model a living framework providing the platform to adjust as needed in order to achieve success (Mitchell & Coles, 2003; Teece, 2010). The dimension of opportunity alignment provides an important link in the evolution of business model research between the fixed model perspective of business models and the dynamic nature of business models (Rhoads, 2013a). Proposition five explores the presence of the dimension of opportunity alignment within entrepreneurs' business models. Opportunity alignment as a dimension of business models was expressed very directly by the founder of MediPro1: *"My business model is simply a continuous state of improvement."*

When asked to expound on this statement, he discussed how he is faced with constant change and his business model needed to reflect those changes in order to be able to compete. The founder of Detoxgenix related a similar perspective regarding her business model in the following statement: *"We started as a drug store option but realized that our world was changing and if our business model didn't change we would be dead in no time at all."* The need to have a flexible and innovative element within the business model was universally addressed. Each venture acknowledged the importance regarding this dimension and the need to maintain the ability to align to fit their central business opportunity when change was needed in order to compete. Business model adjustment to be able to properly align with an opportunity was unanimously voiced by each study participant; however the amount of change varied with each venture. Some ventures like MediPro1 discussed the idea of continual change whereas other venture's such as Digisurance were much more calculated and limited in the changes made to their model.

When asked to expound on the nature and causes of changes to their models a clearer understanding of the dimension of opportunity alignment emerged. Table 7 below provides examples of the answers regarding opportunity alignment.

TABLE 7

OPPORTUNITY ALIGNMENT WITHIN BUSINESS MODELS

Company	Select examples of descriptions and nature of the opportunity alignment within the business model
MediPro1	"Many factors influence us to make changes in our business model. Change is critical for us, and we try to make sure we drive as much of the change as possible."
Phogentrix	"We have had to change our business model slightly, but are still trying to get it right as we learn more about our market."
Detoxgenix	"Our model was originally based on sales through nutrition centers. We quickly understood that we were not set up to be able to compete in that way and had to change our model to reflect who we were and what we could actually do. We ended up moving to an MLM model and have done quite well."
Digisurance	"We are pretty confident about our business and have not had to make too many major changes to our model."
FishTank	"As we work with our key partners, they have technology changes they introduce which sometimes can create a nightmare for us. When these changes come to us if we are not set up to be able to integrate them we will get left behind, so we change our model sometimes based on our partners."
ASCENT	"I know I have made changes to our model but I'm not sure how many. We have had to deal with the changes in the economy and rise of alternative forms of training such as cross-fit."

As presented in the table above, many different reasons were provided for causes of change to business models. These reasons were both internal to the venture as well as external. Interestingly, the most common internal factor which caused a business model to change was a change in the structural dimension. This dimension appears to be at the center of most business models and impacts the overall frame of the model and the ability of the business model to pursue new opportunities effectively. Each of the eight ventures attributed at least part of the changes in their business model to some element of structure. This included items such as a change in the founding team, the addition or loss of key personnel, and increases in team understanding or skill set as a venture progressed. The other dimensions of value creation and capture and value networks seemed to revolve around the stability and abilities of the team, or the structure, of the venture.

Whereas there was great consistency regarding the internal factors leading to changes in the business model, external factors were more diverse. Entrepreneurs discussed issues such as new competition, changes in technology, the economic conditions within their market, and government regulations. Each venture identified some combination of external factors which caused the need for change. Additionally, the ventures discussed whether or not changes were proactive on their part or reactive due to forced changes around them. Responses varied based on each venture yet, it appeared that the ventures with the more defined sense of each of the four foundational dimensions of structure, value creation, value capture, and value networks had a stronger balance of proactive versus reactive change. Similarly, experience appeared to be a factor to consider. In this study, four of the participants were first time entrepreneurs and four were repeat entrepreneurs. The more experienced entrepreneurs tended to have a balance of both proactive changes to their business model to fit their understanding of the opportunity at hand whereas first time entrepreneurs were more likely to react to changes once their model was in place. For example, the founder of MediPro1 was very insistent that continuous improvement within their business model was a key to their long term success. He continued to explain this as evidenced through the following comment:

> *"As we change our business model, we have to be careful to not simply change for the sake of change or to react to every fad around us. We try very hard to evaluate the resources we have, our team and the current state of our model to make sure the right changes are made. We have to make sure that we understand who we are and to not simply react to everything going on around us."*

This concept of opportunity alignment is an important dimension in the viability of a venture's business model. Although the mechanics of the dimension require continued development, the participants in the study clearly articulated the presence of this dimension within each of their business models providing support for the arguments made within propositions five and six.

DISCUSSION

The evolution of understanding regarding the nature and impact of business models is an important focus within management research. Within this emergence of the literature is the need to understand the broader nature of business models beyond simply definitions (Zott et al., 2011). One area of focus is the role of business models within new ventures as a framework for understanding how to pursue new opportunities (George & Bock, 2011). This study focused on the nature of business models within new ventures through a case study approach to verify the presence of common dimensions put forward in extant literature. These dimensions include the venture's structure, value creation and value capture methods, their value network and the more recently identified dimension of proper alignment between the above dimensions and the focal opportunity (Rhoads, 2013a).

Through this study, I gained access to real entrepreneurs pursuing real opportunities and employed the case study method to better understand their business models validating the propositions within the literature. This study is the first to employ this method to better understand the dimensions of business models and how they work within new ventures. This approach allows for an intimate understanding of the workings of new ventures and offers insights only available through practice based testing (Shane, 2000). The findings of this study do in fact support the propositions herein and contribute to our overall understanding of business models.

Contributions

This study makes several important contributions for both research and practice. First of all is an answer to the call issued by Zott et al. (2011) and others to conduct research which moves beyond definitions and develops greater understanding regarding the nature of business models. This study provides insights into the reality of four dimensions that have been argued theoretically throughout existing research. Rather than focusing on definitions, this study validates the presence of core dimensions that make up the basis of a business model. The unique configuration and composition of these dimensions provides the ability for each venture to compete distinctively even under common circumstances. Although some studies have tried to outline all the possible types of business models, this study shows how each business model can be unique and is therefore a unique theory for each firm while being composed of common elements or dimensions.

Second, using gestalt theory, this paper provides greater understanding of the broader more holistic nature of a business model. While the four dimensions of structure, value creation, value capture and value networks have been identified in various forms by many scholars, confusion regarding what a business model actually is remains (George & Bock, 2011; Zott et al., 2011). Gestalt theory provides an explanation for this challenge and establishes greater clarity regarding the composite nature of business models and the need to understand not only the core dimensions separately, but the impact of their combined nature which produces an additional fifth dimension as a result of their combination: opportunity alignment. This study provides support for the presence of this dimension within business models.

A third contribution as a result of this study is the link between the fixed modular or blueprint perspective of business models and the more flexible dynamic nature of business models. A growing question is which perspective explains business models and what is the impact of each (Demil & Lecocq, 2010)? This study through the validation of opportunity alignment as a fifth dimension of business models provides a bridge between the two perspectives indicating that they will often exist together and a complete understanding of a venture's business model cannot leave out one perspective or the other.

Finally a key contribution of this study is the path provided for future research. This study provides great insight into the nature of business models within real ventures. Along with this, several opportunities for future development become clear. One is the need to better understand the factors which contribute to the development of each unique business model and the differences within business model dimensions at varying stages of a venture's life cycle. This perspective was highlighted in the partial support of the first proposition which dealt with structure. A future study which examined life cycle stages and business model dimensions would not only augment business model research and understanding but would provide potential insights into firm life cycle centered research. A second opportunity for future research is to further study the antecedents to business model changes. This study identified several high level factors such as internal changes, external pressures, entrepreneurial experience, and overall market conditions. Each of these factors can be examined in detail providing greater insight into the balance between business model choice and the need to be able to adjust or realign the business model to remain a viable venture. Additionally, this study provided insight into the growing topic of the static versus dynamic natures of business models (Demil & Lecocq, 2010). An additional opportunity centers on the expansion of the study context. Whereas I focused primarily on new ventures, an examination of more established firms may yield additional insights. One specific area is the dimension of structure. This dimension was clearly defined by the participants in this study as the founding team and their ability to connect externally. However, in a more established firm other aspects of structure may be more visible such as the specific component of coordination, issues of power and authority, and the role of the superordinate goal. This type of study would not only extend business model understanding, but may enhance long-standing perspectives on structure within organization design.

Additionally, this study makes several contributions for practice as a result of the case study method employed. First is the recognition by entrepreneurs of the importance of understanding and developing each of the dimensions of a business model. Several study participants were able to gain greater insight into ways to enhance their models through better understanding of each of the dimensions discussed. Specifically, the areas of value creation and value networks provided learning opportunities for study participants. Although both dimensions were identified in the course of their interviews several participants recognized the need to be more thorough and creative in these two areas specifically. Another contribution for practice is the understanding of the importance of structure. Structure was the most common factor which influenced business model change. In this context, the element of structure that was clearly articulated as most important was the ability to build the right founding team and ensure the ability of the team to be able to create linkages with external partners in an effective manner. Finally is the need to be able to understand proper alignment with the opportunity at hand. This is a dynamic process balanced between reactive responses to changes and proactive adjustments to be able more effectively pursue opportunities.

Limitations

Although this study makes several key contributions to both research and practice, it is not without limitations. First of all in choosing to use the case study method, certain elements regarding the generalizability of the findings are limited. This is worth exploring in a follow up study but was accepted as a limitation based on the benefit of the intimate understanding that could be gained about business models through real case examples. An additional limitation is the self-reported data gathered through the interview process. Because some of the items discussed happened in the past there is a possibility that key elements were omitted or altered based on retrospection. Additionally, this study focused on the early venture stage of a firm. Some of the findings regarding the nature and presence of each of the business model dimensions identified may be limited due to the stage of each venture. There may be additional insights gained from a broader examination of firms at varying stages of their life cycles. However, the findings of this study warrant the acceptance of these limitations and provide greater understanding in this emerging stream of literature.

CONCLUSION

Business models do indeed impact each business opportunity. This study highlighted the realities of business models within new ventures and examined the nature of business models to broaden current understanding. This study generates several potential insights for future research and practice opportunities. Business models do appear to contain certain important dimensions discussed herein that provide a framework for a venture's pursuit of a new opportunity. Business models also incorporate an important link between the need to have a set framework and the need to have a more dynamic perspective in order to be able to maintain effective alignment between the venture and the focal opportunity.

THE IMPACT OF BUSINESS MODEL DIMENSIONS ON NEW VENTURE PERFORMANCE

ESSAY THREE ABSTRACT

As business model research continues to develop, a growing debate centers on the nature of business models. Within this debate, two perspectives are central: the more fixed blueprint perspective and the dynamic perspective of business models. Within this study, I examine the presence of the key dimensions of business models which make up each perspective and their impact on new venture outcomes. Additionally, I examine how such factors as a venture's technology and the nature of the venture's market impact the relationships between these competing perspectives and venture outcomes. I test these relationships with a sample of early stage technology ventures. The results indicate that both the blueprint and the dynamic perspective both have a significant impact on venture outcomes. The findings also provide insight into how factors such as venture's technology and market moderate the relationship between the dynamic perspective and venture outcomes.

Keywords: Business models, blueprint, dynamic, new ventures, gestalt theory

INTRODUCTION

Since the late 1990's business models have continued to become an increasingly important construct within multiple domains. Initially business model research focused on the intersection of technological innovation and market changes (Timmers, 1998) and has continued to emerge to become a construct of interest from multiple perspectives. Although there continue to be differences in the exact nature of the construct depending on the focus of the researcher, growing acceptance of the overall importance of the construct has led to a need to refine our understanding of business models through examining not simply the construct itself but the nature of business model impact on firm outcomes (Zott & Amit, 2007).

Business models impact both existing firms as well as new ventures. One of the growing foci of business models research, and the context for this study, is the construct's ability to impact the entrepreneurial enactment process of a new venture (George & Bock, 2010). During the process of pursuing new opportunities, the venture's business model can have a significant impact on the venture's ability to grow and achieve commercialization success (Zott & Amit, 2007; Rhoads, Townsend, & Busenitz, forthcoming). Zott and Amit (2007) examined the relationship between various design themes of business models and post-IPO performance of entrepreneurial firms finding support for the idea that a business model's purpose or design theme influences market performance of entrepreneurial firms following the IPO process.

Rhoads et al. (forthcoming) explored the impact of a new venture's business model design theme or central purpose on the relationship between a venture's resource base and its ability to generate early stage revenues. A developing research stream is focused on understanding the differences between a fixed model or blueprint perspective of business models and the dynamic nature of business models (Demil & Lecocq, 2010). Inherent in this emerging focus is the question of the impact on performance of each. It is valuable to delineate the differences between each and increasingly important to understand the impact of each on venture performance. The purpose of this study is to explore the relationships between these two different perspectives of business models with early stage new venture performance.

This study will proceed first by outlining the existing business model literature and the nature of each perspective; the fixed model or architectural blueprint of a business model versus the dynamic nature of a business model. This is followed by a closer examination of the impact of each of the perspective on new venture performance, leading to an empirical analysis of these relationships employing a sample of technology based ventures in the early stages of the commercialization process. In so doing, this study provides multiple key contributions to our understanding of the business model construct. This analysis will be the first to examine empirically the relationship between each dimension of business models as either fixed or dynamic depictions of a business model with new venture outcomes. In so doing, additional understanding of the construct will be created as well as how the dynamic nature of the construct specifically links to the potential success of a new venture. Second, this study will help establish greater clarity regarding the ability of business models to address the challenges associated with the pursuit of a new opportunity by an early stage venture. This is important as it continues to establish the boundary conditions associated with the business model construct in delineating the explanatory ability of business models. Finally this study leads to an additional path for future research addressing the need to understand the broader nature of the construct and its impact on venture performance as discussed by Zott, Amit, and Massa (2011) in their recent review of business model focused research.

THEORY AND HYPOTHESES

Literature Review

Business Models. The rise in importance of business models over the past several years has led to a focus on understanding not only the nature of the construct, but on the impact of business models on venture outcomes. Early work on business models addressed the rise of technology and specifically the internet as a new domain for business and therefore required a new model for succeeding as a business (Timmers, 1998). This inquiry continued to progress by examining the nature of a business model and providing various conceptualizations of the construct. These conceptualizations generally describe a plan for engaging in business (Applegate, 2000; Weill & Vitale, 2001), a model or representation (George & Bock, 2009; Osterwalder, 2004), or a framework (Amit & Zott, 2001). More recent work examines the role of business models in understanding venture performance through consideration of business model choice and design themes (Zott & Amit, 2008). Although its development is still in its early stages, business models are increasingly characterized as frameworks for understanding how a venture approaches new opportunities (George & Bock, 2010; Teece, 2010). A business model is a composite construct containing unique dimensions which help explain the architecture of the venture (Teece, 2010). An important component of business models is the notion of the structure of the venture, the value which can be created and captured by the venture and the venture's relationships within its value network (Chesbrough & Rosenbloom, 2002; Timmers, 1998; Zott & Amit, 2007).

Additionally, an added dimension of business models is emerging, opportunity alignment, which explores the dynamic nature of the construct in order to be able to address the challenges associated with effectively pursuing an opportunity (Demil & Lococq, 2010; Rhoads, 2013a). Together these dimensions frame the theory of each individual venture through the explanation of how the venture will attempt to begin the pursuit a new opportunity. Although it is commonly accepted that the nature of business and especially opportunities for new ventures is dynamic, only recently is research beginning to address this side of business models. A business model is an architectural blueprint of a venture outlining the plan for pursuing a new opportunity (Teece, 2010); however a business model also addresses the relationship between the blueprint and the need to be able to adjust to ensure the right alignment between the model and the opportunity (Demil & Lococq, 2010; Rhoads, 2013b). It is this relationship between the blue print of a venture's model and the continual alignment between the model and the opportunity that is beginning to provide greater clarity of understanding regarding the broad nature of business models. It seems that both the architectural blueprint perspective and the dynamic or opportunity alignment perspective are constructive in understanding the nature of business models. The question then is: what is the impact of each on a venture's performance?

Business models as architectural blue prints. Within the growing body of business model research, a point of focus is the relationship between the fixed or architectural nature of business models versus the dynamic nature of business models (Demil & Lecocq, 2010). The architectural perspective of business models addresses the nature of venture components in the form of a blueprint or model at a given point in time (Demil & Lecocq, 2010). The purpose of this perspective of the business model is to better articulate the design of the business model and the key components of the architecture in order to better understand the model depicted to address new opportunities known as the blueprint of the venture (Teece, 2010). The blueprint perspective of the business model has been the focus of much of the work to date and includes various depictions of key dimensions which make up the architecture of the business model. These depictions range from three dimensions (Hedman & Kalling, 2003) to seven dimensions each unique and contributing to the composite construct nature of business models (Demil & Lecocq, 2010).

Through an extensive analysis of existing research, it becomes clear that there are commonly discussed elements which make up the core architecture of a venture's business model. Earlier, Rhoads (2013a) examined business model centered research published in high quality management journals and found four dimensions of business models that were most commonly addressed when referring to the more fixed nature of a venture's business model. These dimensions are the structure, ability to create value, the mechanisms in place to capture the value created, and the value network within which the venture plans to operate (Rhoads, 2013a,b; Shafer, Smith & Linder, 2005).

Structure within business models articulates the presence of internal resources and their links to potential external exchange partners in order to achieve a common goal or outcome (Osterwalder, 2004; Scott, 2003). Within a new venture, structure commonly focuses on the founding team and the links between the founding team and external exchange partners in order to be able to pursue a new opportunity. In this context, the structure of the venture as a key dimension of the business model is a critical component for both organization and venture success (Eisenhardt & Schoonhoven, 1990; Weinzimmer, 1997).

The second business model dimension is the depiction of value creation. Value creation is most often linked directly to the concept of business models and focuses on the ability to produce a desired output for those associated with the venture (Zott & Amit, 2007). Value creation in the context of business models deals not only with customer outcomes but with the relationships throughout each of the venture's exchange partners and is therefore an important component of the venture's ability to be successful (Alt & Zimmerman, 2001).

Closely linked to value creation is the idea of value capture. Value capture addresses the business model's depiction of how the benefits created with exchange partners throughout the value network can be appropriated by the venture (Betz, 2002; Chesbrough & Rosenbloom, 2002). This moves beyond simply the ability to capture revenues, although a critical activity, but considers the value created through work with partners, suppliers, as well as customers. In this context, value capture as a component of the architecture of the venture's business model can be argued to be directly linked to the ability of the venture to achieve performance outcomes.

The fourth dimension within the blueprint perspective of business models is the concept of the value network. Within the business model construct, value networks relate to the "web of relations" a venture creates with external stakeholders (Demil & Lecocq, 2010: 231). The venture's depiction of the value network as a key element of the business model clarifies the relationship of the venture to the external environment and creates a map of linkages which can play a role in how the structure of the venture connects to potential partners to create and capture value (Peppard & Rylander, 2006). This map or web of relations between the venture and the value network is a model of how the venture will position itself to engage in the entrepreneurial enactment process and is a vital part of the venture's ability to progress successfully through the startup process.

These four dimensions are increasingly being seen as core elements which make up the architectural blueprint perspective of a venture's business model (Demil & Lecocq, 2010). Much of the current business model focused literature addresses these dimensions as elements of a how a venture will attempt to enter and compete in a market (McGrath, 2010; Teece, 2010; Zott & Amit, 2007). Although each is an individual dimension, the four together when combined create the basis for a composite construct as the framework of a business model as an architectural blueprint. This blueprint is an architectural model of how a venture will pursue a new opportunity; it creates an initial understanding of the most effective path at a given point in time for the venture to follow in order to be able to achieve venture success. Zott & Amit (2010) discusses this concept as the "template of a how firm conducts business" and argue that it is this template or blueprint which provides the basis for common understanding as well as provides a common "toolbox" to be able to enact a business opportunity and achieve positive outcomes (Zott & Amit, 2010: 222). Teece (2010:174) argues that the blueprint is the "logic and plan required to earn a profit" and is therefore essential to the potential success of a new venture. The dimensions within the blueprint of the business model provide a clear plan for a venture to pursue an opportunity and without the plan it is difficult to understand how best to engage in the pursuit of a new opportunity. The blueprint or architectural perspective of business models is a plan that must be clearly defined and understood in order to yield positive outcomes. This is visible in the example of Sun Microsystems' challenges in the early 2000's (Tam, 2003). As Sun addressed the need to pursue new opportunities, they sought to develop a new business model. However, as depicted in a Wall Street Journal article in 2002, "Sun Microsystems was not able to clearly define its business model" and therefore there was no clear plan for addressing the new opportunity creating a steady loss in revenues for the company (Shafer, Smith Linder, 2005: 200). A missing component of Sun's ability to succeed was a clearly defined blueprint of its business model. It is proposed that a clearly defined architectural blueprint is directly linked to the ability of a new venture to achieve positive performance outcomes leading to the following hypothesis:

Hypothesis 1: The more specific the new venture's blueprint of its business model is the better the new venture's performance.

The dynamic nature of business models. Whereas the blueprint perspective of business models addresses the architectural model or template of how a venture is positioned to pursue a new opportunity, the question remains, how does the blueprint work within a changing context? It is clear that new ventures are engaged in a process of continual change in order to be able to be successful in the pursuit of new opportunities. It is this continual change that makes the blueprint perspective of business models insufficient. The static nature of the model is not able to provide a clear path for optimal success when aspects of the opportunity change.

This is evident in the example of the early days of Segway. During its early years, as Segway developed its technology to create an alternative mode of transportation, the Segway Human Transporter, it initially built its model to be able to address the general population's ability to get around. The original model was built on providing a new form for people to move through their communities. Their structure was clearly defined, and the organization defined their focus on value creation and how to capture it as well as established a clear network within which to pursue the opportunity. However, as they introduced their products, they were not as successful as they estimated. Their blueprint was clearly defined yet was not sufficient to achieve success. As their understanding of the market and market needs shifted, they were forced to adjust their business model. The technology was considered illegal to use on most sidewalks and walk ways, the costs were considered too high, and the need from the market perspective was not clearly defined. Obviously changes were needed which involved a greater degree of alignment between the dimensions within the blueprint of the model and the newly defined and increasingly better understood opportunity;

specifically on the value network and value creation dimensions. They adjusted their model and created better alignment between their model and the opportunity (ICMR, 2008). This example is not unique to Segway and is evident in most new ventures. Without the process of business model change a new venture's model is unable to effectively align with a dynamic business opportunity.

It is the dynamic perspective which addresses the evolutionary element of business models in order to be able to pursue an opportunity in a changing environment (Teece, 2010). This perspective has been identified in various forms such as the transformational nature of business models, the process of business modeling, the innovative nature of business models (Demil & Lecocq, 2010; Mitchell & Coles, 2003; Teece, 2010), the evolutionary perspective of business models (Yip, 2004; Teece, 2010), the narrative approach to business models (Magretta, 2002), and as a unique dimension of opportunity alignment as a result of considering the interaction of each of the combined dimensions of the model centered perspective outlined above (Rhoads, 2013a). As Demil and Lecocq (2010) point out, the basic premise of the dynamic perspective of business models addresses the multiple "refinements to create internal consistency and/or to adapt to its environment (2010: 228)." New ventures typically operate within a context of much change, and as they pursue new opportunities, continual considerations regarding adjustments to the business model in order to achieve successful venture outcomes may be very advantageous (Demil & Lecocq, 2010; George & Bock, 2010).

This adjustment or realignment process creates the ability to effectively pursue opportunities in a changing environment. As a venture adjusts its business model to more accurately reflect the opportunity it is pursuing, it is able to maintain the correct alignment between the blueprint of the model and the realities of opportunity (Demil & Lecocq, 2010). The dynamic perspective of business models can therefore be argued to be an important factor in being able to achieve desired new venture performance. As Mitchell and Coles (2003) discuss, the ability to adjust one's business model is central to being able to continually outperform the competition. The process of aligning the key dimensions of a business model creates business model changes which allow the business model to be able to more accurately reflect the complex market.

However, there is a delicate balance between effective business model change and too much change. Business model change is considered a form of innovation and can be a key factor in the ability of many venture's to outperform the competition (Demil & Lecocq, 2010). In the same context, business models that change too much may become too innovative or radical and may have a more difficult time establishing traction during the startup phase (Mitchell & Coles, 2003). This occurs due to the inability to establish viable links with defined partners both upstream and downstream in the venture's value network caused by the continual changes creating information asymmetries between the venture and its partners (Gambardella & McGahan, 2010; Heeley, Matusik & Jain, 2007). It is in this context that I contend that whereas business model change is essential for new venture success, too many changes can actually become a barrier to success leading to the following hypotheses:

Hypothesis 2a: Business model changes are positively related to new venture performance.

Hypothesis 2b: There is a curvilinear relationship between business model changes and new venture performance.

Moderating Factors: The ability of the business model to change in order to reflect more accurately a changing market or opportunity of interest is argued as being important to venture success (Schweizer, 2005; Teece, 2010). This is especially true as technology ventures attempt to organize and enter a market. One of the specific challenges of technology based ventures is the ability to position a new technology while considering the factors associated with technology acceptance by the market (Heeley & Jacobson, 2008). The more unique the technology the more important it is that the links between the venture and the market are clear and properly aligned so as to reduce the level of uncertainty that exists (Heeley & Jacobson, 2008). As outlined above, the business model is the mechanism which allows this challenge to be addressed. As a venture establishes its business model it must "(a) conceptualize the venture as an interrelated set of strategic choices; (b) seek complementary relationships among elements through unique combinations; (c) develop activity sets around a logical framework; and (d) ensure consistency between elements of strategy, architecture, economics, growth, and exit intentions." (Morris, Schindehutte, & Allen, 2005: 733). Within these actions associated with a venture's business model the nature of the venture's technology directly impacts frequency with which these mechanisms are carried out.

For technology ventures, the focal technology is identified as one of the most important factors associated with the venture's ability to enter a market (Uotila, Maula, Keil, & Zahra, 2009). As a business model is set up, the nature of the technology impacts not only the formation of the business model, but the need for the business model to adjust in order to remain aligned with the opportunity and the market. In this light, the nature of the technology directly influences the ability of the venture to successfully enter the market (Heeley et al., 2007). The more radical the technology the greater the asymmetries between the venture and the market which can create a challenge within the process of maintaining the correct degree of alignment between the business model and the opportunity (Heeley & Jacobson, 2008). If there are information asymmetries or a lack of alignment between the venture and the needs of the market, it is often the case that radical innovations introduced to the market will not be able to lead to positive performance (Heeley et al., 2007). The business model must adjust in order to be able to navigate through the ambiguity which can exist and create a clearer path or alignment between the venture and the market. Therefore, it can be argued that the nature of the venture's technology will moderate the relationship between the changes in a venture's business model and venture performance. The greater the gap between the venture and the market due to the radical nature of the technology, the greater the need will be to adjust the business model to more effectively align with the opportunity and the market.

> *Hypothesis 3: The radicalness of the venture's technology will moderate the relationship between business model change and venture performance such that the more radical the technology, the greater the positive relationship between business model change and venture performance.*

Additionally, as a new venture attempts to enter a new market, the nature of the market influences venture success (McArthur & Nystrom, 1991). One of the key challenges of a new venture is to position itself and its technology in the market in a viable manner (Zott & Amit, 2008). The degree of uncertainty in product markets within the venture's environment is a key factor in how a venture enters a market and can impact the venture's activities and outcomes (Dess & Beard, 1984; Penrose, 1959). The greater the demand uncertainty within a market the more the environment impacts the ability of the venture to survive and grow due to the competitive nature of firms vying for scarce resources and customer acceptance (Aldrich, 1979; McArthur & Nystrom, 1991). The venture's business model will be critical in addressing the challenges associated with markets associated with high demand uncertainty (Gambardella & McGahan, 2010). The greater the demand uncertainty of a market the more difficult it is for a venture to accurately assess the customer preferences for the venture's products or service and to predict how customer preferences or demand may change which will impact the acceptance of the venture's products and services by the market (Gatignon & Xuereb, 1997: Narver & Slater, 1990). In this context, it is logical to note that the greater the demand uncertainty within a market, the more difficult it is for a venture to develop the right business model on the first attempt (Gambardella & McGahan, 2010). New ventures must balance the need to enter a market in a unique manner in order to differentiate from the competition while maintaining the right alignment between the venture's business model and the market opportunity (Mitchell & Coles, 2003). Therefore, a static business model will be less applicable in helping to determine venture performance. As a venture attempts to enter a market and appropriately position its technology, the market conditions, customers, or potential exchange partners are often difficult to define and tend to shift frequently (Narver & Slater, 1990). Accordingly, so too must the venture's business model change in order to maintain the correct degree of alignment between the venture and the opportunity. The presence of demand uncertainty within a focal market precipitates the need for a new venture's business model to be continually adjusting. Therefore I contend that the degree of demand uncertainty within the market will moderate the relationship between the changes in a venture's business model and venture performance increasing the importance of business model change in uncertain environments leading to the following hypothesis:

> *Hypothesis 4: The demand uncertainty of the venture's environment will moderate the relationship between business model change and venture performance such that the greater the demand uncertainty, the greater the relationship between business model changes and venture performance.*

METHODS AND DATA

To test these hypotheses, I developed a sample of technology based new ventures from archival records provided by a technology commercialization assistance agency (the agency) headquartered in the Southwestern U.S. Based on the availability of the requisite data, my final sample totaled 165 observations. The database contains data on technology-based ventures from 24 6-digit NAICS categories. The age of the ventures ranges from 12 months to approximately 84 months.

Measures

Dependent Variable: The dependent variable in this study is a measure of early stage new venture performance. Venture performance is composed of two different measures: capital and revenue. Financial Capital as a measure of early stage new venture performance has been linked as an indicator of new venture success and is therefore a relevant measure for new venture performance (Roure & Maidique, 1986). *Capital* is measured using the records compiled by the agency for each venture for each year of observation. Specifically, the three types of equity-based capital investments that were raised each year and included in this variable were: 1) "angel" investments; 2) venture capital investments; 3) investments made by external organizations. Because entrepreneurial ventures tend to seek capital from multiple sources, the measure was aggregated using the capitalization outcomes from the three sources of equity-based capital to account for the presence of co-investment (Denis, 2004).

Revenue is the second measure used to analyze venture performance. Revenue represents the annual revenue generated by each venture. These measures were collected and compiled by agency representatives. The agency representatives have no bearing on the venture's future success and therefore create no incentives for misrepresentation of performance metrics when reported by the entrepreneurs.

Independent Variables: I use two independent variables in this study: 1) The blueprint of a venture's business model made up of the four foundational dimensions found within existing literature and 2) The changes made to a venture's business model, or dynamism of the business model. These variables were developed through existing literature on business models. The blueprint of a venture's business model is measured using four measures found within existing literature most commonly linked to a model or blueprint based depiction of business models (Amit & Zott, 2001; George & Bock, 2010; Rhoads, 2013a; Teece, 2010). The measures are the structure, value creation, value capture and value network dimensions of a venture's business model. Each of the measures is adapted from existing literature and based on the work of Zott & Amit (2007). The measures use a 5 point scale with anchors of 1 (strongly disagree) and 5 (strongly agree).

These measures assess the presence of each dimension as specified in each venture's business plans, marketing plans, websites, investment prospectuses, and other proprietary corporate documents (support documents). The Blueprint variable measures the presence of each dimension as specified within each venture's support documents rather than the actual functionality of each dimension. This distinction allows for the coding of the presence of each of the four dimensions which comprise the blueprint perspective of a business model to be gathered in a single variable, blueprint, without compromising the distinctiveness of each dimension. In this blueprint measure, structure assesses the identification and roles of the venture team. Value creation measures the presences of defined relationships between the venture and exchange partners and the ability of the relationships to generate benefits (Zott & Amit, 2007). Examples of value creation include: 1) No new combinations of products, services and information are identified within the business models and 2) The business model outlines incentives to be offered to potential exchange partners through transactions which are unique. Value capture addresses the presence of defined mechanisms for capturing the benefit created by the venture such as: 1) Revenue appropriation mechanisms are clearly defined and 2) The relationships between the venture and its exchange partners which will lead to the creation and use of new processes and/or products are outlined. The fourth measure is the venture's value network and it identifies the partners that are being pursued for this new opportunity. The reliability of these measures was assessed using Cronbach's alpha with a result of .72 above the recommended guideline of .70 (Nunnally, 1978). A full list of the measures is included in Appendix 3-A.

Business Model Change is the second independent variable analyzed. It represents the dynamic nature of business models and is measured by coding the variance change in the four dimensions of the venture's business model blueprint. This measure as operationalized represents the dimension of opportunity alignment which was established as a valid dimension of business models through existing literature and tested with a sample of early stage entrepreneurial ventures (Rhoads, 2013b). The scales used in the coding were the same scales outlined in the blueprint measure and assess the venture's structure, value creation plans, value capture mechanisms and the identification of the value network within which the venture will operate. As outlined above, each of the items in the scales was coded based on a 5 point scale. Business model change was operationalized by coding each version of a venture's support documents and comparing the final coding of each version with the coding from each previous version. A change was counted each time a difference was found in the final coding of a venture's blueprint compared to a previous coding. Because the focus of this study is on change versus magnitude of change, any change in blueprint was counted as a business model change. The curvilinear variable of business model change was then calculated by squaring the main variable. The numbers of changes to business models in this sample ranged from 0 changes to 12 changes with the mean being just over 10 changes made. To validate inter-rater reliability, I used two different raters to independently code randomly chosen ventures from the sample. Each rater was provided with written documentation and training on how to code the changes and in person training on how to analyze a set of business documents (those listed above as support documents) in order to code effectively. Once the training was completed, each rater coded five sets of business documents and then compared results to calibrate coding. An additional set of 15 businesses was then selected and independently coded. Overall agreement was high with an inter-rater reliability measure of .91 using Cohen's Kappa. Any differences in coding results were then discussed and agreed upon using the scales outlined above with the lead author having the final determination.

Moderating Variables. In order to examine the relationship between a venture's technology and outcomes, I measured the *radical technology* of a venture following Heeley, Matusik, and Jain (2007) and Gatignon and Xuereb (1997). Radical technology was measured by independent coders using the scales developed and validated by Gatignon and Xuereb (1997). Examples of the scales include the following questions: 1) Is this new technology a major departure from current technology in the market? 2) Does this technology incorporate a small body of existing technological knowledge? 3) Is the future development difficult to forecast? Following Gatignon and Xuereb (1997) the anchors of the 7-point Likert-type scale were 'inaccurate' and 'accurate.' The inter-rater reliability for the coding was calculated using Cohen's Kappa which equaled .76 well above the .61 score argued by Landis and Koch (1977) as significant agreement.

The second variable used was a measure of *Demand Uncertainty* within the venture's focal market following Gatignon and Xuereb (1997) and Narver and Slater (1990) who argued that the degree of demand uncertainty in a venture's focal market plays a central role in the ability of a venture's business model to be linked to positive venture outcomes. This measure was assessed by two coders following a similar process to the coding of the measure of radical technology. The scales were based on scales developed by Gatignon and Xuereb (1997) using a 7-point Likert-type scale with the anchors set at "inaccurate" and "accurate" with a neutral middle choice. Upon completion of the coding, inter-rater reliability statistics were calculated using Cohen's Kappa at .67 above the .61 mark established by Landis and Koch (1977). The items in the measure were: 1) Are consumer preferences difficult to assess for this technology; 2) Demand is difficult to forecast for this technology; 3) Changes in consumer preferences are difficult to predict for this technology.

Control Variables. To rule out alternative explanations, I have included several control variables based on the results of prior research. First, following Zott and Amit (2007), I measure *Environmental Munificence and Dynamism* to rule out the possibility that the venture's ability to generate revenue and capital is enhanced/limited by the attributes and availability of resources of the overall environment in which the venture operates. The measure for environmental munificence/dynamism was calculated following Townsend and Busenitz (2008) by regressing an ordinal scale encompassing ten years on a ten-year panel of data from four industry-level indicators: annual sales, number of establishments, number of employees, and annual research and development expenditures (Ensley, Pearce, & Hmieleski, 2006). The resulting constant of the regression equation is then divided by the standard deviation of each ten-year panel of data. The standardized version of this score is then summed with the other three indicators to form the dynamism measure. Lastly, to eliminate any potential scaling issues, each raw munificence and dynamism score was multiplied by a constant (10).

In addition, I correlated the start year for all the firms with total revenue. Based on an initial analysis, ventures started in 2002 appeared to significantly raise more capital than firms started in the other years. Therefore, I use a dummy variable identifying firms started in 2002 as a control variable, labeled *Yr 2002*. I control for the *Age of the firm* to rule out the possibility that older firms would have had more time to construct routines and/or structures to enhance the firm's ability to generate revenue. I then proceed to analyze the data and determine the extent of support for my hypotheses and the impending implications of the findings.

Because the management team can directly influence the ability of the venture to incorporate both the static and dynamic dimensions of business models, I control for strength of *management team* using a measure collected by agency consultants assigned to determine management skill and overall strength (Amason, Shrader, & Tompson, 2006; Cannella, Park & Lee, 2008; Carpenter & Fredrickson, 2001). This measure includes the following dimensions: 1) The management team has a proven track record based on prior industry/start-up experience; 2) The management team is complete, covering the major operational areas of the company; 3) The management team has a proven track record of achieving major milestones in previous endeavors; 4) The compensation scheme for the management team is appropriate to ensure both short and long-term performance; 5) The management team has access to an adequate board of advisors/directors to provide mentoring. The agency consultants rated the management team on all five dimensions and generated a score scaled between 0 and 100.

ANALYSIS AND RESULTS

Table 8 reports the descriptive statistics as well as the correlations for each of the variables discussed in this study. To ensure that there was not a colinearity issue between the variables, I ran a test for colinearity for each model. The VIF statistics for each of the different variables in the study were at or marginally above 1.0 indicating a lack of colinearity issues and that no single variable exerted undue influence on the analytic results (Neter, Wasserman, & Kutner, 1985). Additionally, the variables met the normality conditions for accepted ranges of kurtosis and skewness (Hair, Anderson, Tatham, & Black, 1998). Initial examination of the correlation table indicates support for hypotheses 1, 3 and 4. This is examined in more detail below.

TABLE 8

Descriptive Statistics

	Mean	StDev	Capital	Rev	Env	MGT	Age	2002	Blueprint	BM Changes	BM Changes 2	Tech	DU
Capital	787704.10	1547403.00	1.0000										
Revenue	287280.70	593294.30	0.22 *	1.0000									
Environment	10.47	2.72	-0.08	-0.10	1.0000								
Management Team	64.21	9.74	-0.10	0.13	-0.22 **	1.0000							
Firm Age	49.45	21.60	0.17	0.17 *	0.02	-0.32 ***	1.0000						
Yr 2002	0.13	0.34	0.08	0.37 ***	-0.13 *	-0.25 ***	0.45 ***	1.0000					
Blueprint	22.18	7.17	0.24 ***	0.15 **	-0.13 *	0.00 ***	0.18 *	-0.04	1.0000				
Biz Mdl Changes	10.49	2.15	0.18 ***	0.01 **	0.39 ***	-0.03	-0.25 **	-0.17 *	-0.01	1.0000			
Biz Mdl Changes^2	114.67	46.30	-0.19 ***	-0.03 **	0.46 **	-0.03 *	-0.24	-0.20	0.00	0.99 **	1.0000		
Technology	0.34	0.48	0.52 ***	-0.06 ***	-0.18 *	-0.30 **	0.22 **	0.21 *	0.10	-0.01	-0.24 **	1.0000	
Demand Uncertainty	4.15	1.88	-0.34 ***	-0.09 ***	0.24 **	-0.34 ***	0.32 ***	0.72 *	-0.07	-0.10	-0.20 **	-0.09	1.0000

Since my dependent variables account for various levels of capital raised and revenue earned, the possibility of multiple data points clustering at 0 exists and could bias the results. Therefore, to test my hypotheses, I utilized single-limit tobit regression to account for the potential effects of clustering in the data and the possible bias of the regression line (Long, 1997). Table 9 below illustrates the results of the single-limit tobit models.

TABLE 9

Tobit Regression Models

	Model 1: Controls	Model 2: Main Effects	Model 2: Technology & Capital	Model 3: Technology & Revenue	Model 4: Demand Uncertainty & Capital	Model 5: Demand Uncertainty & Revenue
Controls:						
Intercept	3051790.00 **	-447881.00 **	-1.07E+07 ***	-1.10E+07 **	5.01E+07 **	5814095.00 *
Environment	65357.34 *	-10168.38 *	130316.20	73095.89 *	250740.10	39538.82
Management Team	37046.12 *	44363.02 ***	108832.50 *	48118.96 ***	-52046.15 **	28226.24 *
Firm Age	-5285.80	-6477.27	8436.61 *	-1240.63	15628.72 **	-1773.73
Yr 2002	2224877.00 **	2332000.00 *	1298123.00 *	1653032.00 **	-899192.50 *	1324056.00 **
Business Model:						
Blueprint		46117.52 ***	105768.80 ***	28209.61 **	57134.88 ***	39972.09 ***
Biz Mdl Changes		47213.93 **	450775.40 **	1231973.00 **	-9104420.00 **	-1734971.00 *
Biz Mdl Changes^2		-2517.74 ***	-24730.11 **	-56166.57 **	410885.80 ***	81492.97 **
Moderator:						
Technology		82711.60 *	1.66E+07 ***	1.17E+07 ***		
Demand Uncertainty		-10332.73 ***			-1.13E+07 ***	-2369968.00 *
Interaction Effects:						
Technology and Biz Mdl Changes			-4016791.00 ***	-2451675.00 ***		
Technology and Biz Mdl Changes^2			249951.80 ***	124540.00 ***		
Demand Uncertainty and Biz MdlChanges					2084136.00 ***	460287.20 *
Demand Uncertainty and Biz MdlChanges^2					-96843.02 ***	-21464.72 *
Model Statistics:						
Log Pseudolikelihood	-1540.77	-1587.27	-2018.75	-1404.00	-2101.65	-1415.37
Pseudo R^2	0.01	0.01	0.07	0.03	0.03	0.02
F-statistic	3.98 **	4.47 **	50.69 ***	3.45 ***	13.30 ***	2.73 **

Model 1 represents the control variables only, and indicates the importance of the management team and demand uncertainty on venture performance. Model 2 presents the results for each hypothesis using capital as the dependent variable as a measure of venture performance and Model 3 presents the findings using revenue as the dependent variable as a measure of venture performance. Hypothesis 1 predicted the relationship between business model clarity and venture performance. The results of model 2 and model 3 are both significant providing support for hypothesis 1 indicating the importance of a clearly defined blueprint of a venture's business model.

Hypotheses 2a and 2b predicted the nature of the relationship between business model changes and venture performance which is measured by capital raised and venture revenue. Again this is represented in Models 2 and 3 as with Hypothesis 1. The findings specify a significant relationship to both capital raised and revenue as a main effect as well as a curvilinear variable providing support for hypotheses 2a and 2b. These results indicate that changes to a venture's business model are potentially important factors contributing to new venture success, however too many changes can actually hurt the venture's ability to raise capital and generate revenue. The plots of curvilinear variable of business models changes show the nature of these relationships and are depicted in Figures 1 and 2 below.

FIGURE 1

Plot of the Curvilinear Effect of Business Model Changes on Revenue Generated

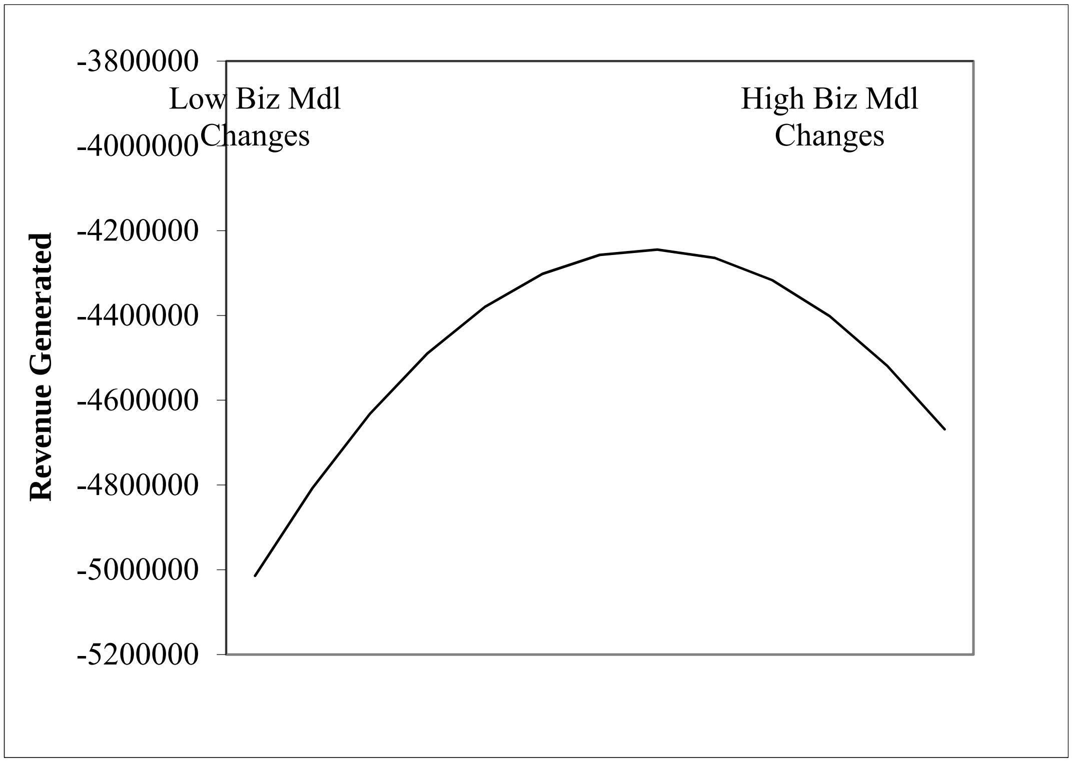
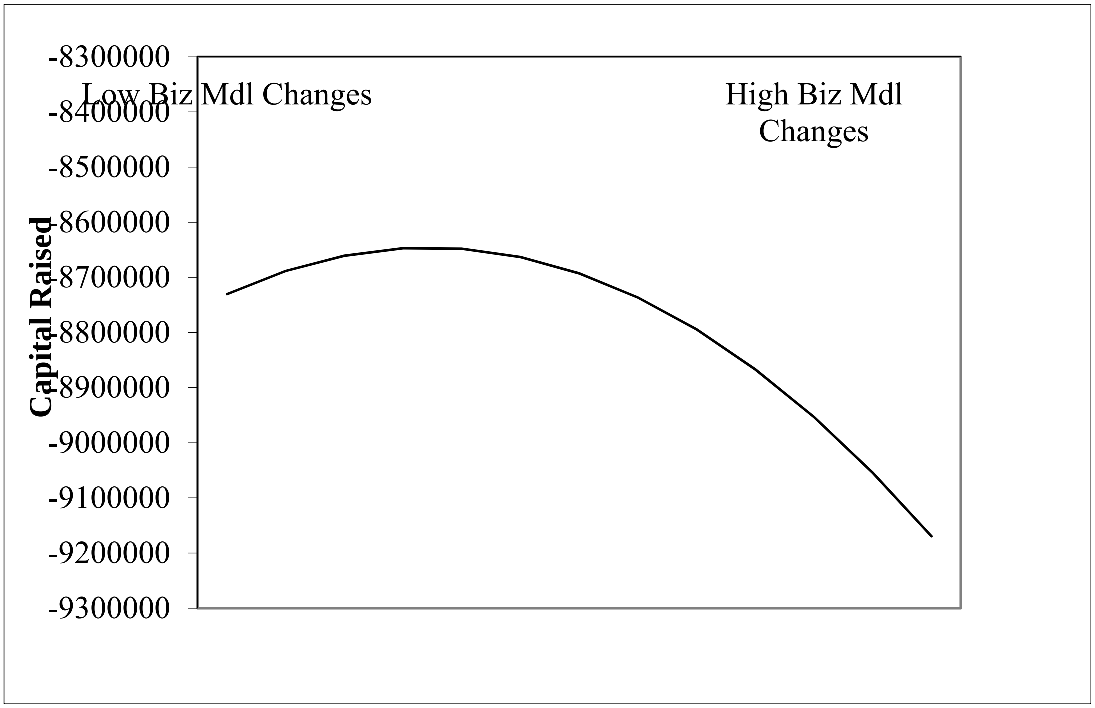


FIGURE 2

Plot of the Curvilinear Effect of Business Model Changes on Capital Raised



Next I examined the relationships between additional factors relating to changes in the venture's business model. Testing moderation requires the use of interaction terms and an analysis of the relationships between the interaction terms and the dependent variable. Hypothesis 3 tested the relationship between a venture's technology and changes within the business model on venture performance. Models 2 and 3 in Table 9 indicate a significant positive direct relationship between the degree of radicalness of a venture's technology (Technology) and the venture's ability to raise capital and with the ability to generate revenue. Additionally, the models yield significant relationships between the interaction term of business model changes and radical technology providing support for hypothesis 3. These findings establish evidence that the more radical a venture's technology the more important changes to the venture's business model become in order to maintain proper alignment between the venture and the opportunity. This extends the work of Demil and Lecocq (2010) as well as the work of Heeley, Matusik, and Jain (2007) which examined the challenges of introducing radical technologies due to the asymmetries which exist between the technology and potential partners. The ability to alleviate these asymmetries through maintaining proper business model alignment can actually improve the venture's abilities to achieve positive performance outcomes. The results are visible in the interaction plots in Figures 3 and 4 below.

FIGURE 3

Plot of Quadratic Interaction between Business Model Changes and Technology on Capital Raised

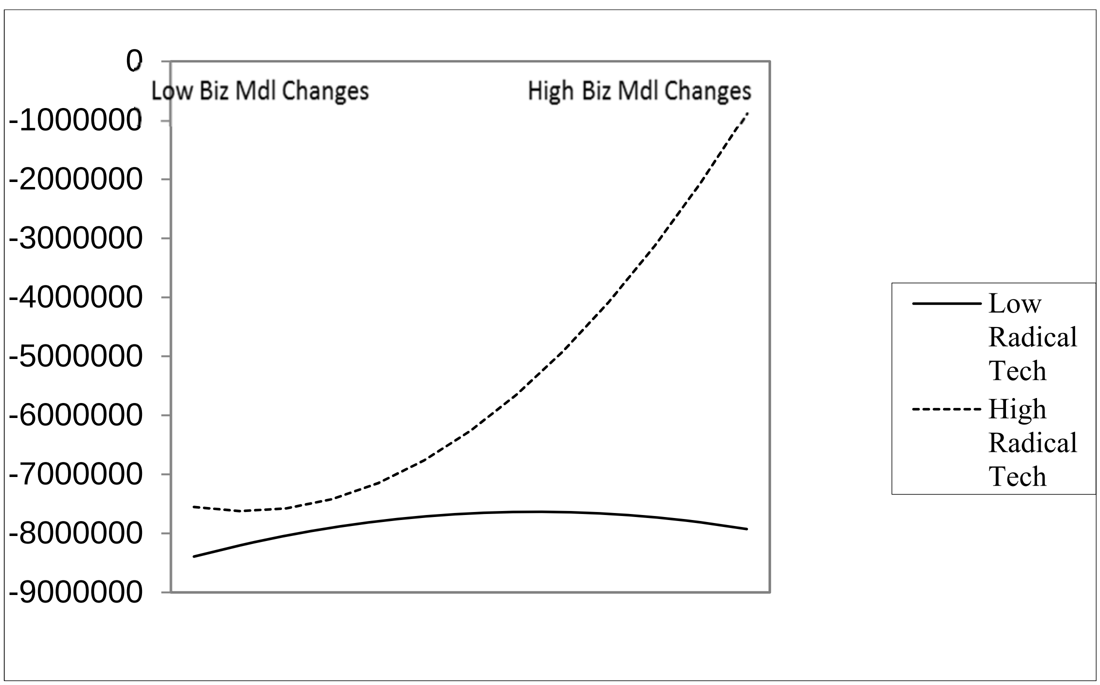
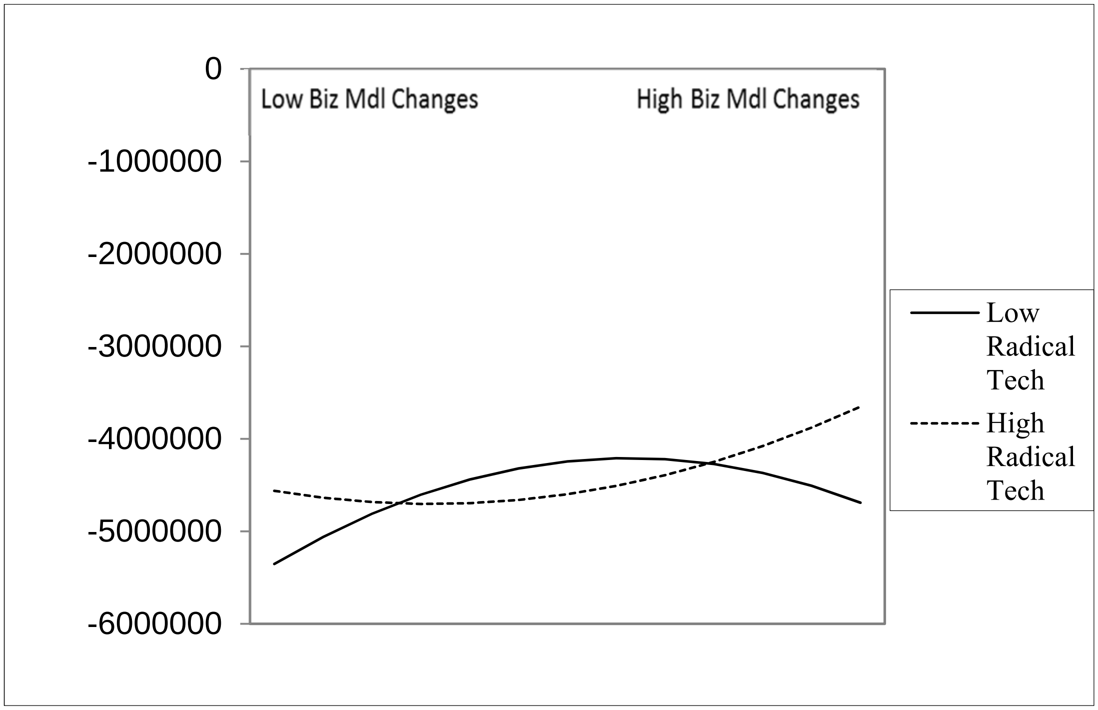


FIGURE 4

Plot of Quadratic Interaction between Business Model Changes and Technology on Revenue Generated



Finally, hypothesis 4 tests the effect of the degree of demand uncertainty on the relationship between changes in a venture's business model and performance. The test of the direct effect of the environment on new venture performance provides interesting insights. There is a significant negative relationship between demand uncertainty and the ability to both raise capital and generate revenue. This speaks to the risk associated with uncertain conditions and the challenges associated with new venture performance under these types of conditions. Continuing with hypothesis 4, I examined the interaction effect between the environment and changes to a business model on both capital and revenue. The findings associated with this relationship indicate significant results supporting a moderated relationship; however the nature of the relationship is not as clearly defined as the moderating effects of technology. The interaction plots presented in Figures 5 and 6 show the nature of these relationships. Figure 5 indicates that when attempting to enter a market with high demand uncertainty for the venture's products and services, the ability to generate revenue increases with the increase in business model changes up to a point and then revenue generation begins to decrease. Although the results do indicate the continued presence of the curvilinear relationship, upon further examination the curvilinear relationship is slightly mitigated. These findings further extend the work of Heeley et al. (2007) wherein they found that the inability to connect with and predict customer perceptions will decrease the ability to create and capture value for these customers. Changes to a venture's business model can help maintain proper alignment with the market thereby increasing the potential to generate revenue; however too many business model changes in the face of high demand uncertainty can actually increase the potential difficulties of connecting with customers and decrease results. Figure 6 addresses the challenges associated with raising capital under such conditions. The plot reveals the nature of the interaction effect which shows the continued presence of a significant curvilinear relationship when attempting to raise capital. Additionally, the plots in these figures indicate that changes in the context of a market with lower levels of demand uncertainty can also hinder the ability of the venture to both raise capital and generate revenue. This may contribute to curvilinear nature of business model changes and the increases in asymmetries between the venture and potential partners with a venture's value network. Overall these findings provide partial support for hypothesis 4.

FIGURE 5

Plot of Quadratic Interaction between Business Model Changes and Demand Uncertainty on Revenue Generated

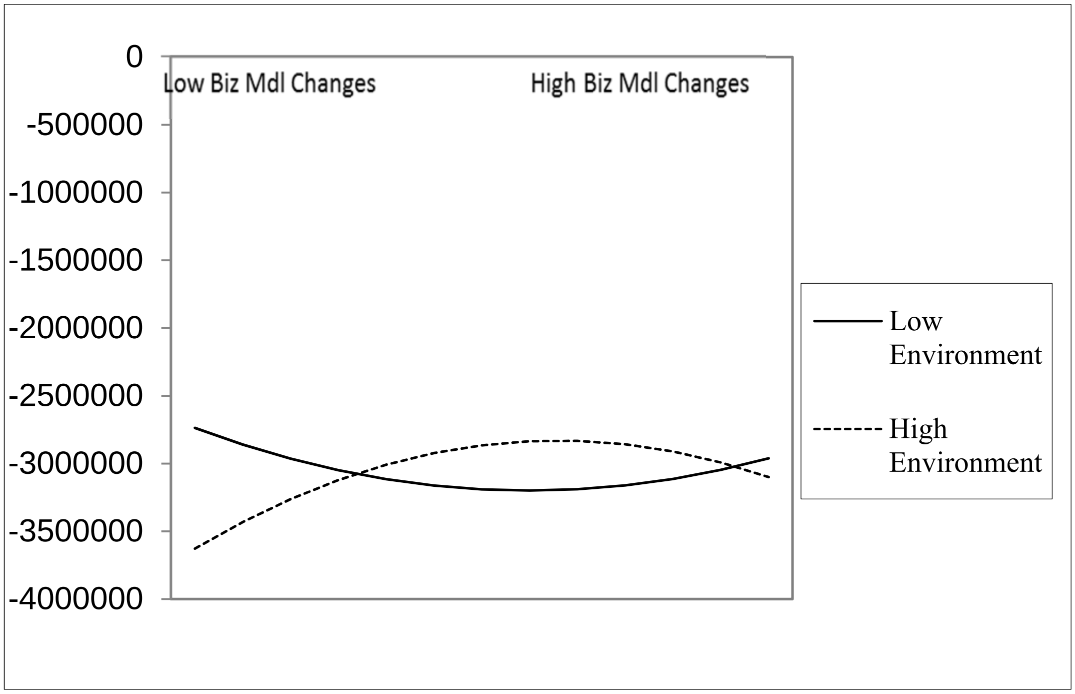
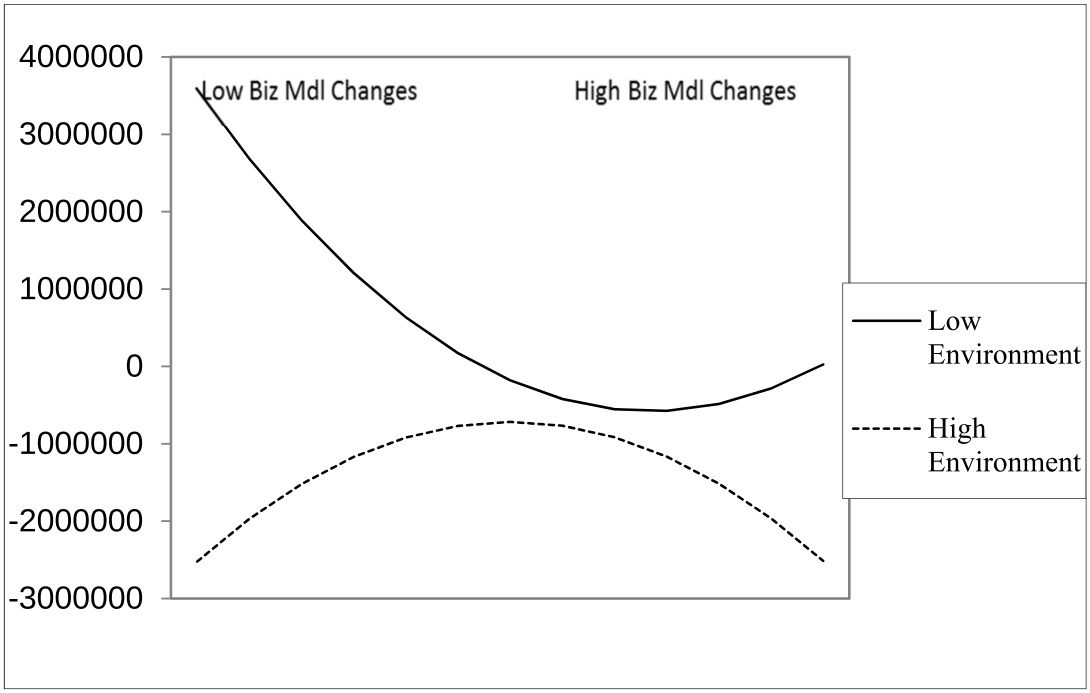


FIGURE 6

Plot of Quadratic Interaction between Business Model Changes and Demand Uncertainty on Capital Raised



Ultimately, the results of these analyses indicate overall support regarding the importance of a clearly defined blueprint of the business model as well as the number of changes made to the business model to maintain proper alignment between the venture and the focal opportunity.

DISCUSSION

Business models are an increasingly important area of focus within management research. Early research centered on the intersection of technological innovation and market changes (Timmers, 1998) and has continued to develop a broader scope of impact within the management domain. Business model work has progressed through a phase of definitions, distinguishing business models from other domains, initial studies on types of business models and initial work on outcomes of different types of models. Current research is beginning to study the differences between various perspectives on business models. One specific growing tension is the nature of business models as static blueprints of the venture versus business models as a dynamic process. Differences in the exact nature of the construct continue to exist based on the focal lens of each researcher; however there is a common acceptance by researchers regarding the need to better refine our understanding of business models through examining not simply the construct itself but the nature of business models' impact firm outcomes (Zott et al., 2011).

This study focused specifically on the nature of business models examining the composite characteristics of the construct which provide insight into both the blueprint perspective as well as the dynamic perspective of business models and the impact of each on venture performance. The blueprint perspective of business models articulates the architecture of how a venture will organize to pursue a new opportunity (George & Bock, 2011). This perspective provides clarity regarding the structure of the organization, the value that will be created and captured by the venture as well as the value network within which the venture will operate (Rhoads, 2013a; Teece, 2010). Specifically, I find that a clearly articulated blueprint of the business model is positively related to the ability of the venture to achieve positive outcomes. This was measured overall as well as by looking at the specific relationship between the business model and the ability to raise capital and generate revenues. This is important as many ventures begin operations and attempt to allow the business model to emerge rather than to consciously develop the business model as part of the startup process. The blueprint of a venture's business model can be a clearly defined map of how best to approach specific opportunities.

Although an important component of pursuing new opportunities, the blueprint perspective of business models alone has significant limitations (Demil & Lecocq, 2010). We have argued here that business models often need to be adjusted in order to maintain the proper alignment between the venture and the changing nature of most opportunities. This dynamic perspective addresses the relationship of each of the elements of the blueprint perspective and the importance of aligning the venture with the opportunity amidst high levels of demand uncertainty within the focal market (Rhoads, 2013a; Teece, 2010). It is argued that it is the dynamic or alignment perspective which depicts the changes made to business models through the course of opportunity pursuit in attempts to maintain the proper alignment between the venture and the opportunity that actually impacts the venture's ability to achieve positive performance results (Mitchell & Coles, 2003). The findings of this study support the importance of the dynamic or alignment dimension of business models. The ability to change a business model to maintain proper alignment between the blueprint of the model and the focal opportunity is positively related to the ability of the venture to raise capital and generate revenue. Recent work suggests that investors have been shown to prefer business models that are based on innovation as a basis for investment (Weill, Malone, & Apel, 2011). Weill et al. (2011) argue that the ability of the business model to be innovative enough to reflect the changing needs of a market is essential and will be more often rewarded by investors. Proper alignment between the venture's model and the opportunity may indicate a clearer understanding of the nature of dynamic opportunities and how to remain flexible to be able to effectively pursue such opportunities. Accordingly, the ability to maintain proper alignment can also be a source of strength as perceived by the market resulting in increased legitimacy and potential revenue generation (Mitchell & Coles, 2003).

Also, inherent in these findings is the potential for diminishing returns for a venture with too many changes to its business model. Therefore, I examined the effect of making an extreme number of changes to the business model and found that even though business model change is important, too many changes may actually become a barrier to success. This can be due to the inability to create viable links with partners throughout the venture's value network leading to increased information asymmetries and a lack of acceptance which extends the work of Demil and Lecocq (2010) and Heeley et al. (2007).

To further understand the impact of change on venture outcomes, I conducted an extensive post-hoc analysis which examined the differences between making a single change to a business model versus making multiple changes. An interesting finding in this post-hoc analysis is the impact of making a single change to a business model. This analysis indicated the presence of a negative relationship between a single change and the ability to raise capital as well as generate revenues. Accordingly, once more than 14 changes were made to a venture's business model the venture seemed to begin to experience diminishing returns in relation to the ability to generate capital and raise revenue. These findings further clarify the curvilinear nature of business model change discussed previously and have significant implications for practitioners as they engage in the process of opportunity alignment. This finding provides greater understanding into the actual nature of opportunity alignment or the dynamic nature of business models. A single change may be seen as a cursory or perfunctory change without real understanding of the complexity and dynamic nature of opportunity pursuit and may actually move the business model away from achieving a state of proper alignment as perceived by both investors and the customers. A clearly defined business model provides an initial focus for opportunity pursuit. This linked with the ability to then make multiple adjustments to the model to maintain alignment can be seen as a venture having an innovative business model connected to the opportunity. This speaks to the importance of maintaining proper alignment through the entrepreneurial process rather than performing a single change and then assuming the business model is viable. This is important as it connotes the idea that both the static and dynamic elements of a business model are factors in new venture success.

Additionally, various factors can impact these relationships and must be considered. Business models may have different impacts under varying contexts both internally and externally. This study specifically examined the role the venture's core technology and the market conditions as moderators. When the interaction of technology and the environment with business model changes were examined, both yielded significant interaction effects. However the nature of the venture's technology as a moderator provided more pronounced results in attenuating the curvilinear nature of business model change. In these findings, the more radical the technology, the more important business model change becomes in the venture's ability to both raise capital and generate revenue. The presence of radical technology increases the need to make internal changes in order to properly introduce the technology to the market thereby increasing the need to make changes to the venture's business model. In the context of raising capital, it is important that the venture demonstrate the ability to be flexible and continually adjust in order to ensure that the radical technology is properly introduced (Heeley et al., 2007; Narver & Slater, 1990; Sanders & Boivie, 2004). Accordingly, when introducing radical technology to the market, it can be difficult to overcome the gap in understanding surrounding the technology that can exist with customers. The ability to adjust the business model to be more effectively positioned to both create and capture value can be essential in achieving venture performance outcomes (Gambardella & McGahan, 2010; Uotila, et al., 2009).

On the other hand, in the face of high levels of demand uncertainty, there remains a potential point of diminishing returns when making too many changes to the venture's business model in the context of raising capital and generating revenue. This finding may actually speak to the more nuanced nature of the impact of the environment on new ventures. The findings indicate that to a point, the interaction between changes to the business model can lead to greater levels of capital raised and revenue generated. When a venture is attempting to enter a market with high levels of demand uncertainty, it is difficult to assess the preferences of customers and how those preferences may change in the future making it difficult to understand how to keep the venture aligned with the potential opportunity in order achieve success. Changes to the business model can signal attempts to stay connected with the opportunity and can positively impact potential investors as well as potential customers. Yet if the venture continues to make too many changes in face of high levels of uncertainty, it becomes more difficult for both investors and customers to make the link between the value creation potential of the venture and the ability to actually create and capture that value. Additionally the findings provide evidence that changes made in markets with lower levels of demand uncertainty can act as a negative influence on a venture's ability to raise capital and generate revenue. Therefore, higher demand uncertainty will result in a more challenging task of maintaining proper alignment between the venture and opportunity.

Overall, the contention of this study is that both the dynamic and blueprint perspectives are critical components of a venture's business model and both impact the ability of the venture to achieve positive outcomes. It is important to clearly define a business model and then continually ensure the business model is aligned with the focal opportunity. This contention is supported by the results of the empirical analysis herein and provides several contributions to both research and practice. One specific contribution is the empirical nature of this study. This study is the first to examine the specific dimensions of business models using the blueprint and dynamic perspectives in the literature empirically creating initial support for the impact of business models on the new venture process. The findings provide insight into the role of both perspectives of business models and extend the work of Demil and Lecocq (2010), Teece, (2010), Rhoads (2013a) and others who have put forth the concept of business models as a composite construct involving multiple dimensions including both the blueprint and dynamic perspectives. More precisely, this study creates greater understanding regarding the nature of both the blueprint and dynamic perspectives and how each impacts venture performance.

An additional contribution builds on this concept and provides an extension of business model research as a unique construct with defined explanatory ability. This study expands the continued development of business models as a construct unique from strategy or other domains with unique explanatory ability. Specifically, this study begins to empirically introduce the concept of business models as an important element of explaining opportunities within entrepreneurship research. Opportunities as a topic of research is of central importance to entrepreneurship research. Increasingly opportunities are highlighted as a focus of many entrepreneurship studies requiring greater focus to better understand the nature of opportunities and the process of pursuing opportunities by new ventures (Busenitz et al., 2003). This study provides evidence that business models can be an important construct in the development of the opportunity space within entrepreneurship.

Future Research

An additional contribution of this study is the clearer path for future research established as a result of the findings. One possible opportunity is a deeper examination of the factors which influence the ability of a venture to make changes to its business model. For example, building on the work of Penrose (1959), there is an opportunity to further examine firm growth and the effects the management team as a set of resources has not only a venture's business model choice, but the ability to make changes to the business model to maintain opportunity alignment and achieve positive venture outcomes. In this context, understanding the key elements of the founding team that drive changes in a business model, and how the management team affects the number of changes made and the potential impact on the ability of a business model to be either a source of competitive advantage or a barrier to success. A second opportunity is to not only explore the differences between the number of changes to a business model, but degree of change made. This type of study could extend such research as the exploration versus exploitative perspectives of innovation as well as the roles of such factors as path dependence, size, and age have on changes made. A third opportunity is to further explore the role of business models as a resource. Emerging work on Resource Based View is examining the nature of isolating mechanisms and the role such mechanisms play in a resource or bundle of resources to potentially lead to a sustained competitive advantage. There is an opportunity to examine the role of business models as a resource and the impact of maintaining proper opportunity alignment as an isolating mechanism for a new venture. In this context, not only is the business model a key resource, but the process of adjusting the business model may also be a key element leading to such factors as the development of causal ambiguity, social complexity, and path dependence. This type of study would extend the RBV framework within entrepreneurship research as well as further explore the emerging focus on performance differences within entrepreneurial ventures (Foss, 2011).

Limitations

As is the nature of most empirical studies, this study while providing much needed clarity regarding the nature of business models also has limitations that should be considered. One such limitation is the potential generalizability of the findings. The context of this study was technology based startups. Therefore, the results should be considered carefully when looking at a context outside of technology based ventures or even within much more established and large organizations. Additionally, the nature of the data must always be considered. The study of startup performance is a challenge due to the dynamic nature of the process and the issues associated with collecting viable data. Portions of the data collected were self-reported figures on revenue and growth. Although through the use of an outside organization to collect the data there is no visible motivation to skew the data, self-report data can be a potential limitation. This is one of the reasons I chose multiple measures of venture performance to use within the study.

Implications for Entrepreneurs

This study also has implications for entrepreneurs. Every venture will face challenges associated with selecting and implementing an effective business model. Accordingly, most ventures struggle with the issues of capital and long term performance success as many are not able to achieve positive performance outcomes which often impacts the ability of the venture to sustain momentum beyond the first couple years of its existence (Headd, 2003). This study provides greater understanding regarding the importance and impact of a clearly defined business model. Many entrepreneurs may have a tendency to allow the business model to evolve rather than clearly articulate the model and then adjust it to maintain the proper alignment necessary to launch their ventures. The findings herein provide a link between the importance of having a business model and being flexible enough to allow the model to evolve. Additionally, these results suggest that it is important to continually revisit a business model and ensure that the model is continually correct. This requires a specific focus for entrepreneurs. The tendency for many entrepreneurs may be to define their business model and maybe make a change or two and then focus on the challenges of running a business. This process may actually lead to a decrease in their abilities to raise capital and generate revenue, ultimately impacting their ability to achieve long term success. In the end, for practitioners, this study emphasizes the importance of understanding what a business model is, the need to choose and develop a model, and the need to continually focus on maintaining the alignment between the model and the market. This importance is much more than a theoretical proposition but actually has calculable differences in two key elements of entrepreneurial success: the ability to raise the appropriate level of capital as well as the ability to generate revenue and maintain operations.

CONCLUSION

As seen in the vast and growing numbers of articles, both academic and practitioner based, business models are an important topic of focus. The research stream is still young and in development with many questions needing to be addressed. This study provides insight into one area specifically, the nature and impact of business models on early stage new venture outcomes. Business models provide the architectural blueprint for how a new venture will pursue a new opportunity. Additionally, business models contain a dynamic component which provides the proper alignment between the blueprint and the opportunity as it faces changes in the environment or from within. This study outlines these dimensions and indicates a positive relationship between each dimension and the ability of the new venture to achieve positive outcomes along with the ability to make changes in order to maintain the proper alignment between the venture and the opportunity at hand.

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APPENDIX 1-A

Contributions to Business Model Understanding

Elements	**Org Design**	**Strategy**	**Customer Marketing**	**Business Models**
Core Domain Assumptions	People can organize, Superordinate goal exists	Firm exists, competitors exist, information asymmetry, resource allocation	Able to access customers Know who customers are and Can organize around needs	A business opportunity exists, Value can be created and captured,
Primary Focus	Internal coordination of people to minimize conflict and achieve tasks	Outperform Competitors - Firm Performance - Competitive Advantage.	Seek to Understand Customer Needs	Exploit Opportunities , Build a viable Value Chain
Domain Dimensions	Structure, Internal Coordination around tasks, Politics, Power, Compensation , TMT	Competitive Advantage, Value Creation Transactions, Decision Making, Resources, Diversification, Competitive Dynamics, Industry Structure	Needs analysis, Market Understanding , Customer Focus, Customer Value Creation,	Value Chain, Structure, Value Creation, Value Capture, Strategy Execution, Dynamism, Innovation, Opportunity Alignment & Exploitation
Overlapping Dimensions	Structure	Firm Performance, Value Creation,	Customer Value	Value Chain, Structure, Value

		Value Chain	Creation	Creation, Value Capture, Strategy Execution
Distinct Dimensions	Internal coordination of people to minimize conflict and achieve tasks	Outperform Competitors, Resource Allocation, TMT Decision Making	Customer Messaging, Needs Analysis, Market Understanding	Align with and Exploit Opportunities, Align with Value Chain
Dominant Perspectives on Business Models	BM's are a result of the correct organizational structure and design to maximize the ability to perform key tasks necessary to achieve organizational goals.	Business Models are a manifestation of a firm's strategy. A BM is the firm's attempts to implement a strategy to create & capture value and outperform competitors.	A BM allows the firm to align with its customers' needs and expectations in order to create value for the customer.	A BM is the architecture of the firm in order to be able to exploit new opportunities and create value throughout the firm's value chain.
Relevance to Entrepreneurship	Organizational form, team composition	Market entry, SWOT, Build the necessary resource base	Customer Value	Opportunity Exploitation

APPENDIX 1-B

Business Model Literature Review and Coding Results

Article	Structure	Value Creation	Value Capture	Value Network
Amit & Zott, 2001	1	1	1	1
Baden-Fuller & Morgan, 2010	1	1	1	
Bonaccorsi et al., 2006		1	1	1
Capelli, 2009	1	1		1
Casadesus-Masanell &Ricart, 2010	1	1	1	
Chesbrough & Rosenbloom, 2002	1	1	1	1
Clemons, 2009	1	1	1	1
Dahan, Doh, Oetzel, & Yaziji, 2010		1		1
Demil & Lecocq, 2010	1	1		
Fiet & Patel, 2008	1			1
Gambardella & McGahan, 2010		1	1	
George & Bock, 2011	1	1	1	
Markides & Charitou, 2004	1	1	1	1
McGrath, 2010		1	1	
Mullins & Komisar, 2010		1		
Obloj et al., 2010	1	1	1	1
Pauwels & Weiss, 2008	1	1	1	1

Sabatier, Mangematin, & Rousselle, 2010		1	1	1
Sanders & Boivie, 2004	1	1	1	1
Seelos & Mair, 2007	1	1	1	1
Smith. Binns, & Tushman, 2010	1	1	1	1
Sosna, Trevinyo-Rodríguez, & Velamuri, 2010	1	1	1	1
Svejenova, Planellas, & Vives, 2010	1	1	1	1
Teece, 2010	1	1	1	
Thompson & MacMillan, 2010		1	1	1
Williamson, 2010			1	1
Wirtz, Schilke, & Ullrich, 2010		1	1	1
Yunus, Moingeon, & Lehmann-Ortega, 2010	1	1	1	
Zott & Amit, 2007	1	1	1	1
Zott & Amit, 2008	1	1	1	1
Zott & Amit, 2010	1	1	1	1
Zott, Amit, & Massa, 2011	1	1	1	1
Totals	**23**	**29**	**27**	**23**
% of Total Articles	**71.88%**	**90.63%**	**84.38%**	**71.88%**

APPENDIX 2-A

Case Study Interview Guide

Context Setting Questions:

1. How would you describe your business model?
2. What are the main components of your business model?
3. How would you describe what success for your venture looks like?

Proposition 1:

1. Describe the structure of your venture.
2. How does the structure of your venture relate to your venture's position in the market?
3. In what ways does the structure of your venture impact the potential to achieve success?

Proposition 2:

1. How would you define value creation?
2. Does your business model facilitate value creation? If yes, in what ways?
3. How does your business model relate to the ability of your venture to create value?

Proposition 3:

1. How does your business model facilitate your ability to benefit from the value created?
2. What mechanisms are in place to capture the value generated by your business model?

Proposition 4:

1. Describe each of the potential outside relationships you have as a venture?

Propositions 5 &6:

1. Describe how the structure of your venture, your ability to create and capture value, and your network of potential outside relationships relate to each other?
2. What happens to your business model if one of the above listed components of your venture changes?
3. What factors cause your business model to change?
4. How often have you changed your business model as a result of each of the factors you just described?
5. When your business model changes, describe what is affected by those changes.

APPENDIX 2-B

Case Study Protocol Template

1. Background

a) Identify previous research on the topic

b) Define the main research question being addressed by this study

c) Identify any additional research questions that will be addressed

2. Design

a) Identify whether single-case or multiple-case and embedded or holistic designs will be used, and show the logical links between these and the research questions

b) Describe the object of study (e.g. a new testing procedure; a new feature in a browser)

c) Identify any propositions or sub-questions derived from each research question and the measures to be used to investigate the propositions

3. Case Selection

a) Criteria for case selection

4. Case Study Procedures and Roles

a) Procedures governing field procedures

b) Roles of case study research team members

5. Data Collection

a) Identify the data to be collected

b) Define a data collection plan

c) Define how the data will be stored

6. Analysis

a) Identify the criteria for interpreting case study findings

b) Identify which data elements are used to address which research question/sub question/proposition and how the data elements will be combined to answer the question

c) Consider the range of possible outcomes and identify alternative explanations of the outcomes, and identify any information that is needed to distinguish between these

d) The analysis should take place as the case study task progresses

7. Plan Validity (Chapter 5 in Yin (2003))

a) General: check plan against Höst and Runeson's (2007) checklist items for the design and the data collection plan

b) Construct validity - show that the correct operational measures are planned for the concepts being studied. Tactics for ensuring this include using multiple sources of evidence, establishing chains of evidence, expert reviews of draft protocols and reports

c) Internal validity - show a causal relationship between outcomes and intervention/treatment (for explanatory or causal studies only).

d) External validity – identify the domain to which study finding can be generalized. Tactics include using theory for single-case studies and using multiple-case studies *to investigate outcomes in different contexts*.

8. Study Limitations

a) Specify residual validity issues including potential conflicts of interest (i.e. that are inherent in the problem, rather than arising from the plan).

9. Reporting

a) Identify target audience, relationship to larger studies (Yin, 2003)

10. Schedule

a) Give time estimates for all of the major steps: Planning, Data Collection, Data Analysis, Reporting. Note Data Collection and Data Analysis are not expected to be sequential stages

APPENDIX 2-C

Business Model Dimension Measures Used to Code Venture Support Documents

The following measures were adapted from existing business model scales developed by Zott & Amit (2007). These measures focus on the presence of the each dimension within a venture's business model. These measures are based on a 5 point scale. The anchors are strongly agree and strongly disagree with a neutral middle score.

Structure:

1. The roles of each employee within the venture are clearly articulated
2. The venture's internal organization does not allow for clearly defined links with external partners
3. Coordination between each structural component was well defined.
4. The venture's structure provides a clear map of how resources, authority, and responsibilities are allocated.

Value Creation:

1. The relationship between the venture and an exchange partner leads to the creation of a new process or product
2. No new combinations of products, services and information are identified within the business model
3. The business models outlines incentives to be offered to potential exchange participants in transactions are novel or unique
4. The business model does not link participants to transactions in novel ways

5. Each link with a partner is identified as being able to contribute to the ability to establish long term customer loyalty or high switching costs.

Value Capture:

1. The business model offers new combinations of products, services and information that can be used by the venture
2. Revenue appropriation mechanisms are clearly defined
3. The relationship between the venture and an exchange partner will lead to the creation of a new process or product

Value Network:

1. The business model identifies new participants which were previously not linked together
2. The business model outlines an unprecedented variety and number of participants and/or goods
3. The business model does not provide a clear sense of potential external exchange partners.

Opportunity Alignment and Pivots:

1. Each dimension is demonstrated to complement the other dimensions in the goal of pursuing the focal opportunity
2. Each dimension is shown to contribute to the ability of the venture to establish long term value generating relationship
3. The business model remains unchanged amidst changes in the venture's external environment
4. Changes internal to the venture do not lead to changes in the business model

APPENDIX 3-A

Business Model Dimension Measures used to Code for the Presence of the Blueprint of a Venture's Business Model

These measures were adapted from the existing scales developed by Zott & Amit (2007). These measures focus on the presence of the each dimension within a venture's business model. These measures are based on a 5 point scale. The anchors are strongly agree and strongly disagree with a neutral middle score.

Structure:

1. The roles of each employee within the venture are clearly articulated
2. The venture's internal organization does not allow for clearly defined links with external partners

Value Creation:

1. The relationship between the venture and an exchange partner which may lead to the creation of a new process or product is clearly outlined
2. No new combinations of products, services and information are identified within the business model
3. The business models outlines incentives to be offered to potential exchange participants through transactions which are unique
4. The business model does not link participants to transactions in novel ways
5. Each link with a partner is identified as being able to contribute to the ability to establish long term customer loyalty or high switching costs.

Value Capture:

1. The business model offers new combinations of products, services and information that can be used by the venture
2. Revenue appropriation mechanisms are clearly defined
3. The relationships between the venture and an exchange partner which will lead to the creation of a new process or product are outlined

Value Network:

1. The business model identifies new participants which were previously not linked together
2. The business model outlines an unprecedented variety and number of participants and/or goods

Opportunity Alignment and Pivots:

1. Each dimension is demonstrated to complement the other dimensions in the goal of pursuing the focal opportunity
2. Each dimension is shown to contribute to the ability of the venture to establish long term value generating relationships
3. The business model remains unchanged amidst changes in the venture's external environment
4. Changes internal to the venture lead to changes in the business model