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### The entrepreneur's business model: toward a unified perspective

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#### **Abstract**

Highly emphasized in entrepreneurial practice, business models have received limited attention from researchers. No consensus exists regarding the definition, nature, structure, and evolution of business models. Still, the business model holds promise as a unifying unit of analysis that can facilitate theory development in entrepreneurship. This article synthesizes the literature and draws conclusions regarding a number of these core issues. Theoretical underpinnings of a firm's business model are explored. A six-component framework is proposed for characterizing a business model, regardless of venture type. These components are applied at three different levels. The framework is illustrated using a successful mainstream company. Suggestions are made regarding the manner in which business models might be expected to emerge and evolve over time.

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#### 1. Introduction

Ventures fail despite the presence of market opportunities, novel business ideas, adequate resources, and talented entrepreneurs. A possible cause is the underlying model driving the business. Surprisingly, little attention has been given to business models by researchers, with much of the published work focusing on Internet-based models. The available research tends to be descriptive in nature, examining approaches to model construction, noting standard model types, citing examples of failed and successful models, and discussing the need for new models as conditions change. Yet, no consensus exists regarding the definition or nature of a model, and there has been no attempt to prioritize critical research questions or establish research streams relating to models. The purpose of this study is to review existing perspectives and propose an integrative framework for characterizing the entrepreneur's business model.

#### 2. Literature review

#### 2.1. What is a 'business model'?

No generally accepted definition of the term "business model" has emerged. Diversity in the available definitions poses substantive challenges for delimiting the nature and components of a model and determining what constitutes a good model. It also leads to confusion in terminology, as business model, strategy, business concept, revenue model, and economic model are often used interchangeably. Moreover, the business model has been referred to as architecture, design, pattern, plan, method, assumption, and statement.

It is possible to bring order to the various perspectives. A content analysis of key words in 30 definitions led the authors to identify three general categories of definitions based on their principal emphasis. These categories can be labeled economic, operational, and strategic, with each comprised of a unique set of decision variables. They represent a hierarchy in that the perspective becomes more comprehensive as one progressively moves from the economic to the operational to the strategic levels.

At the most rudimentary level, the business model is defined solely in terms of the firm's economic model. The

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concern is with the logic of profit generation. Relevant decision variables include revenue sources, pricing methodologies, cost structures, margins, and expected volumes. Hence, Stewart and Zhao (2000) approach the model as "a statement of how a firm will make money and sustain its profit stream over time." At the operational level, the model represents an architectural configuration. The focus is on internal processes and design of infrastructure that enables the firm to create value. Decision variables include production or service delivery methods, administrative processes, resource flows, knowledge management, and logistical streams. Mayo and Brown (1999) refer to "the design of key interdependent systems that create and sustain a competitive business." Definitions at the strategic level emphasize overall direction in the firm's market positioning, interactions across organizational boundaries, and growth opportunities. Of concern is competitive advantage and sustainability. Decision elements include stakeholder identification, value creation, differentiation, vision, values, and networks and alliances. Slywotsky (1996) refers to "the totality of how a company selects its customers, defines and differentiates its offerings, defines the tasks it will perform itself and those it will outsource, configures its resources, goes to market, creates utility for customers and captures profits."

Among the available definitions, strategic elements are most prominent. Further, an analysis of models frequently cited as being well conceptualized (e.g., Dell, Nucor, Wal-Mart, IKEA, Walgreen) suggests that the elements making these models unique transcend the architecture of the firm or how it makes money. More than the sum of its parts, the model captures the essence of how the business system will be focused. Accordingly, the following integrative definition is proposed: "A business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create sustainable competitive advantage in defined markets."

To illustrate the distinction between a business model and related concepts, consider Dell Computer, a firm that has grown to over US\$32 billion in annual sales in just 20 years. The company's products include a mix of PCs, notebooks, workstations, servers, and software products. Their business concept involves selling customized computer solutions directly to customers at competitive prices. However, the Dell business model integrates strategic considerations, operational processes, and decisions related to economics. It is designed around elimination of intermediaries, systems built to order, highly responsive customer service, moderate margins, rapid inventory turnover, speedy integration of new technologies, and a highly efficient procurement, manufacturing, and distribution process. Adherence to these elements guides operational decision making and the firm's ongoing strategic direction.

The business model is related to a number of other managerial concepts. It captures key components of a

business plan, but the plan deals with a number of start-up and operational issues that transcend the model. It is not a strategy but includes a number of strategy elements. Similarly, it is not an activity set, although activity sets support each element of a model.

#### 2.2. What do we know about business models?

Interest in business models is relatively recent, with much of the research appearing in the past decade, a time period associated with the "new economy." The popularity of the term is evidenced in a keyword search using the Google search engine and the ABI-Inform database. Results from these two sources indicated 4,326,812 and 2387 entries, respectively, for "business model."

The largest volume of research has come from electronic commerce (Mahadevan, 2000). Early work focused on capturing revenue streams for web-based firms. Subsequent efforts identified model types based on product offerings, value-creating processes, and firm architecture, among other variables. For a detailed inventory of these models, see <a href="http://digitalenterprise.org/models/models.html">http://digitalenterprise.org/models/models.html</a>. As it became evident that the number of potential models was limitless, researchers began focusing on model taxonomies.

In spite of this foundation, progress in the field has been hindered by lack of consensus over the key components of a model. Table 1 presents a synopsis of available perspectives regarding model components. The perspectives are notable both for their similarities and differences. The number of components mentioned varies from four to eight. A total of 24 different items are mentioned as possible components, with 15 receiving multiple mentions. The most frequently cited are the firm's value offering (11), economic model (10), customer interface/relationship (8), partner network/roles (7), internal infrastructure/connected activities (6), and target markets (5). Some items overlap, such as customer relationships and the firm's partner network or the firm's revenue sources, products, and value offering.

This lack of consensus has hindered progress on a number of related issues. Few insights are available regarding the conditions that make a particular model appropriate, ways in which models interact with organizational variables, existence of generic model types, and dynamics of model evolution, among other questions. Attempts at model decomposition acknowledge the existence of interdependencies among components but shed little light on the nature of the relationships. Limited progress has also been made in establishing methodologies for evaluating model quality.

#### 2.3. Theoretical underpinnings of business models

Issues of theory represent another area receiving scant attention. A notable exception can be found in Amit and Zott (2001), who approach the business model construct as a unifying unit of analysis that captures value creation

Table 1
Perspectives on business model components

Source	Specific components		r E-commerce/	Empirical	Nature of data
			general	support (Y/N	<u> </u>
Horowitz (1996)	Price, product, distribution, organizational	5	G	N	
	characteristics, and technology				
Viscio and Pasternak (1996)	Global core, governance, business units, services,	5	G	N	
	and linkages				
Timmers (1998)	Product/service/information flow architecture,	5	E	Y	Detailed case
	business actors and roles, actor benefits, revenue				studies
	sources, and marketing strategy				
Markides (1999)	Product innovation, customer relationship, infrastructure	4	G	N	
	management, and financial aspects				
Donath (1999)	Customer understanding, marketing tactics, corporate	5	E	N	
	governance, and intranet/extranet capabilities				
Gordijn et al. (2001)	Actors, market segments, value offering, value activity,	8	E	N	
	stakeholder network, value interfaces, value ports,				
	and value exchanges				
Linder and Cantrell (2001)	Pricing model, revenue model, channel model,	8	G	Y	70 interviews
	commerce process model, Internet-enabled commerce				with CEOs
	relationship, organizational form, and value proposition				
Chesbrough and	Value proposition, target markets, internal value chain	6	G	Y	35 case studies
Rosenbaum (2000)	structure, cost structure and profit model, value				
	network, and competitive strategy				
Gartner (2003)	Market offering, competencies, core technology	4	E	N	Consulting
	investments, and bottom line				clients
Hamel (2001)	Core strategy, strategic resources, value network,	4	G	N	Consulting clients
	and customer interface	_	_		
Petrovic et al. (2001)	Value model, resource model, production model,	7	Е	N	
	customer relations model, revenue model, capital model,				
<b>.</b>	and market model		-		D : 11 1
Dubosson-Torbay	Products, customer relationship, infrastructure	4	Е	Y	Detailed
et al. (2001)	and network of partners, and financial aspects		-		case studies
Afuah and Tucci (2001)	Customer value, scope, price, revenue, connected	8	Е	N	
W. W. 177, 1 (2001)	activities, implementation, capabilities, and sustainability	0		3.7	0 1
Weill and Vitale (2001)	Strategic objectives, value proposition,	8	Е	Y	Survey research
	revenue sources, success factors, channels, core				
A1 (2001)	competencies, customer segments, and IT infrastructure	2	C	NT	
Applegate (2001)	Concept, capabilities, and value	3 4	G E	N	50 1:
Amit and Zott (2001)	Transaction content, transaction structure,	4	E	Y	59 case studies
Alt and Timmarman (2001)	and transaction governance Mission, structure, processes, revenues,legalities,	6	Е	N	Literature
Alt and Zimmerman (2001)		O	E	1N	
Dayment and	and technology Value cluster, market space offering, resource system,	4	Е	Y	synthesis 100 cases
Rayport and	and financial model	4	E	1	100 cases
Jaworski (2001) Betz (2002)	Resources, sales, profits, and capital	4	G	N	
DCIZ (2002)	resources, saies, proms, and capital	4	U	1.4	

arising from multiple sources. They argue for a crosstheoretical perspective, concluding that no single theory can fully explain the value creation potential of a venture.

The business model construct builds upon central ideas in business strategy and its associated theoretical traditions. Most directly, it builds upon the value chain concept (Porter, 1985) and the extended notions of value systems and strategic positioning (Porter, 1996). Because the business model encompasses competitive advantage, it also draws on resource-based theory (Barney et al., 2001). In terms of the firm's fit within the larger value creation network, the model relates to strategic network theory (Jarillo, 1995) and cooperative strategies (Dyer and Singh, 1998). Further, the model involves choices (e.g., vertical integration, competitive strategy) about firm boundaries

(Barney, 1999) and relates to transaction cost economics (Williamson, 1981).

Most perspectives on models include the firm's offerings and activities undertaken to produce them. Here, management must consider the firm's value proposition, choose the activities it will undertake within the firm, and determine how the firm fits into the value creation network. Based on Schumpeter's (1936) theory of economic development, value is created from unique combinations of resources that produce innovations, while transaction cost economics identifies transaction efficiency and boundary decisions as a value source. Positioning within the larger value network can be a critical factor in value creation. As part of its positioning, the firm must establish appropriate relationships with suppliers, partners, and customers.

Models implicitly or explicitly address the internal competencies that underlie a firm's competitive advantage. This is consistent with resource-based theory, where the firm is viewed as a bundle of resources and capabilities (Barney et al., 2001). Competitive advantage can emerge from superior execution of particular activities within the firm's internal value chain, superior coordination among those activities, or superior management of the interface between the firm and others in the value network. Also, where the model has proprietary innovative elements, resource advantage theory holds relevance (Hunt, 2000).

The economics of the venture is featured prominently in business model research. An effective model encompasses unique combinations that result in superior value creation, in turn producing superior returns to the firm, consistent with Schumpeterian theory (Schumpeter, 1936). At the same time, the growth and profit aspirations of entrepreneurs vary considerably. Aspirations reflect the firm's relationship to the entrepreneur's career and life and influence enterprise objectives. Business models will differ for ventures with more moderate versus more ambitious aspirations. Various theoretical traditions have implications for entrepreneurial intentions regarding the nature and scope of the venture. Self-efficacy theory is a case in point, with its emphasis on role of an entrepreneur's cognitive capabilities and skills assessment in determining outcomes. Alternatively, the theory of effectuation suggests that entrepreneurs make conjectures about the future, determine what can be done, and goals emerge over time (Wiltbank and Sarasvathy, 2002).

An additional theoretical perspective approaches the business model as interrelated components of a system that constitutes the firm's architectural backbone. With systems theory, the business is viewed as an open system with varying levels of combinatorial complexity among subsystems and bounded by the environment and open information exchange (Petrovic et al., 2001).

#### 3. Model development: an integrative framework

Building on these conceptual and theoretical roots, it is possible to develop a standard framework for characterizing a business model. To be useful, such a framework must be reasonably simple, logical, measurable, comprehensive, and operationally meaningful. In seeking generalizability, the extant perspectives tend to oversimplify a firm's model. The challenge is to produce a framework that is applicable to firms in general but which serves the needs of the individual entrepreneur.

Accordingly, a framework is proposed that consists of three increasingly specific levels of decision making, termed the 'foundation', 'proprietary,' and 'rules' levels. Further, at each level, six basic decision areas are considered. The need for three levels reflects the different managerial purposes of a model. There is, at the foun-

dation level, a need to make generic decisions regarding what the business is and is not and ensure such decisions are internally consistent. Because the foundation level addresses basic decisions that all entrepreneurs must make, it permits general comparisons across ventures and the identification of universal models. At the proprietary level, the model's purpose is to enable development of unique combinations among decision variables that result in marketplace advantage. At this level, the framework becomes a customizable tool that encourages the entrepreneur to focus on how value can be created in each of the six decision areas. The usefulness of any model is limited, however, unless it provides specific guidance and discipline to business operations, necessitating a third level in the model. The rules level delineates guiding principles governing execution of decisions made at levels one and two.

#### 3.1. Foundation level: defining basic components

At its essence, a well-formulated model must address six key questions (see Table 2). These questions have been derived based on commonalities among the various perspectives found in the literature, including those summarized in Table 1. Moreover, each has a foundation in the theoretical work discussed earlier. The most consistently emphasized components concern the value proposition, the customer, internal processes and competencies, and how the firm makes money. To these four, a competitive strategy element has been added, reflecting the need to translate core competencies and the value proposition into a sustainable marketplace position. Finally, a useable framework should apply to all types of ventures, reflecting the design considerations necessary to accommodate differing levels of growth, time horizons, resource strategies, and exit vehicles. Thus, the sixth decision area captures growth and time objectives of the entrepreneur. Let us examine each in more detail.

#### 3.1.1. How will the firm create value?

This first question concerns the value offering of the firm. Decisions here address the nature of the product/service mix, the firm's role in production or service delivery, and how the offering is made available to customers. There is no business without a defined value proposition, and the creation of value provides a justification for the business entity. Its inclusion in the model is supported by the work of Afuah and Tucci (2001), Chesbrough and Rosenbaum (2002), and Rayport and Jaworski (2001), among others.

#### 3.1.2. For whom will the firm create value?

This question focuses on the nature and scope of the market in which the firm competes. To whom will the firm sell and where in the value chain will it operate? Customer types, their geographic dispersion, and their interaction

### Table 2 Six questions that underlie a business model

Component 1 (factors related to the offering): How do we create value? (select from each set)

- · offering: primarily products/primarily services/heavy mix
- offering: standardized/some customization/high customization
- · offering: broad line/medium breadth/narrow line
- offering: deep lines/medium depth/shallow lines
- offering: access to product/ product itself/ product bundled with other firm's product
- offering: internal manufacturing or service delivery/ outsourcing/ licensing/ reselling/ value added reselling
- offering: direct distribution/indirect distribution (if indirect: single or multichannel)

Component 2 (market factors): Who do we create value for? (select from each set)

- type of organization: b-to-b/b-to-c/ both
- local/regional/national/international
- where customer is in value chain: upstream supplier/ downstream supplier/ government/ institutional/ wholesaler/ retailer/ service provider/ final consumer
- broad or general market/multiple segment/niche market
- transactional/relational

Component 3 (internal capability factors): What is our source of competence? (select one or more)

- production/operating systems
- selling/marketing
- information management/mining/packaging
- technology/R&D/creative or innovative capability/intellectual
- financial transactions/arbitrage
- supply chain management
- networking/resource leveraging

Component 4 (competitive strategy factors): How do we competitively position ourselves? (select one or more)

- image of operational excellence/consistency/dependability/speed
- product or service quality/selection/features/availability
- innovation leadership
- low cost/efficiency
- intimate customer relationship/experience

Component 5 (economic factors): How we make money? (select from each set)

- pricing and revenue sources: fixed/mixed/flexible
- operating leverage: high/medium/low
- volumes: high/medium/low
- margins: high/medium/low

Component 6 (personal/investor factors): What are our time, scope, and size ambitions? (select one)

- subsistence model
- · income model
- growth model
- speculative model

requirements have significant impacts on how an organization is configured, its resource requirements, and what it sells. Failure to adequately define the market is a key factor associated with venture failure. Support for the role of customer considerations in delineating a firm's model can be found in Gordijn et al., 2001, Markides, 1999, and Timmers, 1998.

#### 3.1.3. What is the firm's internal source of advantage?

The term 'core competency' is used to capture an internal capability or skill set that the firm performs relatively better than others (Hamel, 2001). Hence, Federal Express delivers a benefit of on-time delivery based on its competency at logistics management, and the organization is configured around this competency. Development and enhancement of this competency solidify the firm's role in the external value chain and become the focus for the internal value chain. These competencies lie at the heart of the business model (Applegate, 2001; Viscio and Pasternack, 1996). A firm can attempt to build advantage around one or more competencies, with general sources of advantage identified by various observers (e.g., Siggelkow, 2002).

#### 3.1.4. How will the firm position itself in the marketplace?

Core internal competencies provide the basis for external positioning. The model must delineate how the entrepreneur intends to achieve advantage over competitors (Amit and Zott, 2001). The challenge is to identify salient points of difference that can be maintained. The entrepreneur attempts to define a unique, defensible niche enabling the firm to mitigate ongoing developments in the environment. Given the ability of firms to quickly imitate one another, the entrepreneur seeks a positioning basis that is more than transitory.

#### 3.1.5. How will the firm make money?

A core element of the firm's business model is its economic model (Linder and Cantrell, 2000). The economic model provides a consistent logic for earning profits. It can be approached in terms of four subcomponents: operating leverage or the extent to which the cost structure is dominated by fixed versus variable costs; the firm's emphasis on higher or lower volumes in terms of both the market opportunity and internal capacity; the firm's ability to achieve relatively higher or lower margins; and the firm's revenue model, including the flexibility of revenue sources and prices.

### 3.1.6. What are the entrepreneur's time, scope, and size ambitions?

Entrepreneurs create different types of ventures, ranging from lifestyle firms to rapid growth companies. Differences among venture types have important implications for competitive strategy, firm architecture, resource management, creation of internal competencies, and economic performance. As such, an integrated business model must capture the entrepreneur's time, scope, and size ambitions or what might be termed the firm's 'investment model.' Examples of four such models are subsistence, income, growth, and speculation. With the subsistence model, the goal is to survive and meet basic financial obligations. When employing an income model, the entrepreneur invests to the point that the business is able to generate on ongoing and stable income stream for the principals. A growth model finds significant

initial investment, but also substantial reinvestment in an attempt to grow the value of the firm to the point that it eventually generates a major capital gain for investors. In a speculative model, the entrepreneur's time frame is shorter and the objective is to demonstrate venture potential before selling out.

#### 3.2. Proprietary level: creating unique combinations

While the foundation level is adequate to capture the essence of a model for many firms, sustainable advantage ultimately depends on the ability of the entrepreneur to apply unique approaches to one or more of the foundation components. Having determined that the firm will sell some combination of goods directly to businesses or will sell in consumer markets at high margins and low volumes, the entrepreneur identifies novel ways to approach such decisions. This is referred to as the proprietary level of the model, as it entails innovation unique

to a particular venture. Where the foundation level is generic, the proprietary level becomes strategy specific. The foundation level model is fairly easy to replicate by competitors; the proprietary level is not. Replication is especially difficult because of interactions among the proprietary-level components. In the earlier Dell Computer example, the 'Dell Direct Method' results from proprietary approaches to defining the value proposition and organizing internal logistical flows.

#### 3.3. Rules level: establishing guiding principles

Once implemented, a model's success can be tied to a basic set of operating rules. These guidelines ensure that the model's foundation and proprietary elements are reflected in ongoing strategic actions. Eisenhardt and Sull (2001) discuss the concept of "strategy as simple rules" (see also Nelson and Winter, 1982). They discuss "priority rules" that determine how Intel allocates manufacturing capacity and "boundary

Table 3
Characterizing the business model of Southwest Airlines

	Foundation level	Proprietary level	Rules	
Component 1: Factors related to offering	Sell services only Standardized offering Narrow breadth Shallow lines Sell the service by itself Internal service delivery Direct distribution	Short haul, low-fare, high-frequency, point-to-point service Deliver fun Serve only drinks/snacks Assign no seats/no first class Do not use travel agents/intermediaries Fully refundable fares, no advance purchase requirement	Maximum one-way fare should not exceed US\$ Maximum food cost per person should be less than US\$	
Component 2: Market factors	B2C and B2B (sell to individual travelers and corporate travel departments) National Retail Broad market Transactional	Managed evolution from regional airline to servicing to 59 airports in 30 states Careful selection of cities based on fit with underlying operating model	Specific guidelines for selecting cities to be serviced 85% penetration of local markets	
Component 3: Internal capability factors	Production/operating systems	Highly selective hiring of employees that fit profile; intense focus on frontline employees Do not operate a hub and-spoke route system. Fly into uncongested airports of small cities, less congested airports of large cities Innovative ground operations approach Independent baggage handling system Use of Boeing 737 aircraft No code sharing with other airlines	At least 20 departures per day from airport Maximum flight distance should be less than miles Maximum flight time should be less than minutes Turnaround of flights should be 20 minutes or fewer	
Component 4: Competitive strategy factors	Image of operational excellence/consistency/dependability	Differentiation is achieved by stressing on-time arrival, low fares, passengers having a good time (spirit of fun) Airline that love built	Achieve best on-time record in industry	
Component 5: Economic factors	Fixed revenue source High operating leverage High volumes Low margins	Short-haul routes and high frequency of flights combined with consistently low prices and internal efficiencies result in annual profitability regardless of industry trends	Maintain cost per passenger mile below US\$	
Component 6: Growth/exit factors	Growth model	Emphasis on growth opportunities that are consistent with business model	Managed rate of growth	

rules" that govern the types of movies Miramax decides to make. Girotto and Rivkin (2000) explain how Yahoo! adheres to a set of guiding rules in the formation of partnerships, a critical part of the firm's business model. At Dell Computer, a rule might involve turning inventory in 4 days or less. Rules are important at the level of execution of the business model. Consistent adherence to basic principles can distinguish two companies having otherwise similar models.

#### 3.4. Applying the framework

Southwest Airlines has a robust business model that has sustained company growth for 30 years, including the aftermath of the 9/11 terrorist tragedy that devastated the industry. Not surprisingly, the Southwest model has been copied in whole or part by others (e.g., JetBlue, RyanAir, United Express). While some have achieved achieve noteworthy performance, none of these firms has achieved the level of success as Southwest, especially in head-to-head competition with the firm. Southwest's superiority in exploiting this model also makes it clear that a well-conceptualized business model affects and is affected by such organizational variables as culture and leadership quality

In Table 3, the Southwest model is first captured at the foundation level. Here, the focus is on what the firm is doing, as opposed to how. This level is concerned with basics of the firm's approach in terms of a standardized set of questions. Next, at the proprietary level, Southwest's model reflects innovation that has changed the ways in which other airlines operate, while reflecting an approach that is difficult to replicate. From Table 3, it can be seen how the model components are exploited for advantage in an innovative yet internally consistent manner. The proprietary model centers on Southwest's core competency, its unique operating system. This operating system (e.g., employee policies, airport and route selection, no code sharing, independent baggage handling, standardization of aircraft) makes possible a unique value proposition (short haul, lowfare, direct service that is on-time and 'fun'). Finally, it would be easy to deviate from this model given competitive and regulatory pressures. However, a number of 'rules' help management avoid strategic or tactical moves that are inconsistent with the model. Rules regarding maximum fares or flight turnaround times effectively delimit appropriate courses of management action, while reinforcing the strategic intent of the firm in the minds of employees.

#### 4. Business model fit, evolution, sustainability

#### 4.1. The issue of fit

Sustainability requires that model components demonstrate consistency, as in the Southwest example. Consistency can be described in terms of both internal and external

"fit," where the former is concerned with a coherent configuration of key activities within the firm and the latter addresses the appropriateness of the configuration given external environmental conditions.

Internal fit includes both consistency and reinforcement within and between the six subcomponents of the model. An economic model with high operating leverage, low margins, moderate volumes, and fixed revenue sources may, by itself, be untenable. Further, the economics must fit with the other components of the model. A given economic model might not be workable when selling in a regional b-to-b market where significant investment in customer relationships is required or when selling a value offering involving extensive customization. If the economic model calls for penetration pricing with low margins and high fixed costs, this may imply a value proposition that centers on medium to low quality, a target market that is fairly broad and relatively price elastic, competitive positioning based on cost leadership, and a growth-oriented investment model.

Ultimately, each component affects and is affected by the other components. While each is vital, the firm's investment model effectively delimits decisions made in all the other areas. For instance, a speculative business, with its shorter time horizon, may require a cost structure with lower operating leverage and a customer focus that is not predicated on long-term customer relationships. Alternatively, if one is building a lifestyle business, the firm is apt to have a more narrowly defined product and market focus, may be more dependent on customer relationships, and is likely to require an economic model that includes lower volumes. With the lifestyle venture, it may not be necessary to invest as much in the model's proprietary elements.

External fit is concerned with consistency between choices in the six areas of the model and conditions in the external environment. As environmental conditions change, the model may require adaptation or wholesale change. Rindova and Kotha (2001) describe the "morphing" of Yahoo's business model from provider of search functions to supplier of content to source of interactive services. When confronting highly turbulent conditions, a strong internal fit can undermine the firm's adaptability in the face of a poor external fit. Companies must work to disrupt their own advantages and those of competitors. Adaptability may require models with loosely fitting elements or introduction of new elements that change the dynamics among existing elements.

#### 4.2. Emergence and evolution of models

Although some entrepreneurs have a clearly formulated model when undertaking a venture, many start with partially formed models and incomplete strategies. A process of experimentation may be involved as the model emerges (and a viable model may never emerge). Lessons

are being learned regarding what is required to make money on a sustainable basis. As competencies are developed, keener insights may result regarding sources of innovation or advantage as they relate to those competencies. The entrepreneur is also likely to become more strategic in his/her view of business operations over time.

In terms of the proposed framework, a firm's model might be expected to evolve from the foundation level toward a more complete articulation of the proprietary and rules levels. Initially, the entrepreneur may have a fair picture of the foundation level and limited notions about some components at the proprietary level. As the firm develops and learns, it is able to flesh out more components at the proprietary level, furthering its advantage, and develops rules that guide operations and ongoing growth. Model evolution can also be linked to the type of venture being pursued. Models for survival, lifestyle, growth, and speculative ventures might be expected to vary in formality, sophistication, and uniqueness. For instance, the proprietor of a lifestyle business may have an implicit model in mind at start-up, and the model may never develop beyond basic decisions at the foundation level. He/she might develop a set of rules of thumb that support the basic model, such as how much inventory must move at certain times of the year. This entrepreneur may periodically deviate from the model, introducing elements that are inconsistent with existing elements. Alternatively, a more formal, comprehensive, and potent model is needed to provide direction and attract resources to a high growth venture. Decisions at the proprietary level become vital for sustainable advantage.

Conceptually, it is possible to envision a business model life cycle involving periods of specification, refinement, adaptation, revision, and reformulation. An initial period during which the model is fairly informal or implicit is followed by a process of trial and error, and a number of core decisions are made that delimit the directions in which the firm can evolve. At some point, a fairly definitive, formal model is in place. Subsequently, adjustments are made and ongoing experiments are undertaken. Siggelkow (2002) characterized such adjustments in terms of augmentation, reinforcement, and deletion. A basically sound model will typically withstand economic downturns and modest disturbances but can become dysfunctional if major discontinuities occur. When external changes undermine a model, it typically cannot be recalibrated; a new model must be constructed. Hence, Grove (1997) describes "strategic inflection points" in the respecification of Intel's model over time.

## 4.3. Linking the business model to strategic management concepts

The business model is consistent with a number of emerging concepts from the field of strategic management. Strategy, in Porter's (1996) view, is about performing differ-

ent activities than competitors or about performing similar activities in different ways. He juxtaposes strategy against operational effectiveness, a concern with performing similar activities better than competitors. The business model has elements of both strategy and operational effectiveness. For instance, a low-cost advantage deriving from a novel approach to distribution might be central to the way in which the firm creates value, reflecting Porter's (1996) notion of strategy. Similarly, the model might call for internal manufacturing, where production processes are fairly similar to those of competitors and the firm's competitiveness in this area is a function of operational effectiveness.

Central to Porter's (1996) recent work is the concept of "activity sets." Organizations configure activities in unique ways, with advantage deriving from how activities fit with and reinforce one another. Activity systems can be mapped so as to capture the evolution of organizations along discernable developmental paths. Siggelkow (2002) characterizes activity sets in terms of core elements, elaborating elements, and interactions. He notes the emergence over time of seven core elements in his study of the Vanguard Group. Implied in this work is a large universe of potential core elements from which a subset is created and elaborated upon as a firm evolves.

The business model organizes these core elements and activities around six key decision areas. The model captures all of a firm's core elements, although more than one core element can fall into a given decision area. Further, each of the six decision areas and the interactions between areas are supported by a variety of activity sets. Unfortunately, the mapping referred to by Porter and Siggelkow (2001) occurs after the fact. The business model represents a framework for doing this constructing in the early stages of a venture and for conducting predictive, what-if scenario analysis. For early stage entrepreneurs, many of the potentially most productive activity sets are less apparent, as the firm has little experience, highlighting the importance of entrepreneurial vision.

The business model encourages the entrepreneur to (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. Strategic choices that characterize a venture are made both intentionally and by default. The business model makes the choices explicit. The model is a relatively simple way to delimit and organize key decisions that must be made at the outset of a venture. At the foundation level, the model provides a framework for deciding what not to do (e.g., what services not to offer) and assists the entrepreneur in assessing consistencies and recognizing trade-offs among decisions. At the proprietary level, truly unique configurations are produced that can result in sustainable advantage.

#### 5. Conclusions

The business model can be a central construct in entrepreneurship research. This article has sought to provide direction in addressing some of the more vexing questions surrounding models. The model represents a strategic framework for conceptualizing a value-based venture. The proposed framework allows the user to design, describe, categorize, critique, and analyze a business model for any type of company. It provides a useful backdrop for strategically adapting fundamental elements of a business. By specifying the elements that constitute a model, the framework enhances the ability to assess model attributes. A model that ignores one or more of the specified components will suffer in terms of its comprehensiveness, while inconsistency can manifest itself both in terms of the fit among decision areas within a given component as well as the fit between components.

With the proposed framework, each of six components is evaluated at three levels. At the foundation level, the model is defined in terms of a standardized set of decisions that can be quantified. A benefit of this standardization is the ability to make comparisons across models from a broad universe of ventures. New avenues for empirical research become possible, ranging from the creation of general model taxonomies and investigations of relationships among the foundation level variables to modeling relationships between the model and a host of endogenous and exogenous variables. Also promising is the ability to identify model archetypes. By applying codes to the various decision choices across the six components of the framework at the foundation level, statistical tools can be used to identify dominant patterns among decision choices.

At the proprietary level, considerable scope for innovation exists within each model component. The model becomes a form of intellectual property, with some entrepreneurs actually obtaining patents for their models. Considerable work remains to properly understand business model innovation. A beginning point is to develop measures of model innovativeness. A further step involves determining how the relative importance of component innovation varies depending on industry or market characteristics.

The business model can serve as a focusing device for entrepreneurs and employees, especially when supported by a set or rules or guidelines that derive from decisions made at the proprietary level. Rules provide a clearer sense of the firm's value proposition and are a source of guidance regarding actions that might compromise the value equation. Additional research is needed regarding what constitutes a rule, types of rules, differences between rules and objectives, qualities of good rules, and ways in which rules become dysfunctional.

Other areas requiring further investigation include the ability of entrepreneurs and others to assess model quality. Systematic approaches for assessing model viability are

needed. Methods are also needed for appraising the model's fit with changing environmental conditions; just as critical are issues surrounding model implementation. One challenge concerns the translation of model components into operational decisions, where the importance of fit will likely differ by activity area. Another challenge involves experimenting with new strategic moves in ways that do not compromise the model. Finally, further insights are needed into the dynamics of model emergence and evolution.

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