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Organizational Transformation through Business Models: A Framework for Business Model Design

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Abstract

Organizations are increasingly inter-connected as they source talent, goods and services from other organizations located in disparate parts of the world. They seek new ways of creating value for themselves, customers and partners. They operate outside and across traditional industry boundaries and definitions. These innovations have led to a focus on business models as a fundamental statement of direction and identity. This paper highlights what is known about the business model concept and where and why it differs from more established concepts of business strategy. It illustrates how the application of business models has transformed organizations. The contribution of this paper is the guidance that it provides for business model design and the insight it provides into business models and their effects on organizations. Following an analysis of how business models can transform organizations, this paper concludes with practical recommendations for business model design.

1. Introduction

The term “business model” is a recent addition to the management literature and largely a product of the dot com era. It is entirely absent from all the most influential books on organizational design, business strategy, business economics and business theory through to the mid- to late 1990s. It is almost everywhere in books on e-commerce, both scholarly and business trade press. It is a marketing catchphrase for IT vendors. This paper reviews business model thought and practice in terms of its contribution to general organizational theory and practice beyond just the e-commerce sphere. The first questions to ask are not “what is a business model?” but why has the term so suddenly appeared? If business thought and practice evolved for a century without it, is business model now a necessary construct or just a short-lived label? What does it add to our thinking to use it instead of, say, “strategy”, “competitive positioning”, “organizational design”, “value chain”, or other more well-established terms?

We examine business models from this perspective of necessary construct versus superfluous neologism. This

requires filtering out the signals from a great deal of noise. As Hawkins states: “as the [dot com] bubble grew, the market filled up with books and articles about business models, ranging from the vaguely analytic to the quasi instructional – how to construct viable business models and how to avoid lemons. The business model seemed to fill a niche even if no one could explain exactly what it was.” (Hawkins 2004, page 65). Even today, most work on business models is taxonomic and descriptive, classifying types of business model in lists, heavily derived from multiple case examples. Typical is Afuah and Tucci’s eight categories: brokerage, advertising, intermediary, merchant, manufacturing, affiliate, community, subscription, and utility (Afuah and Tucci, 2000). Timmers’ classification is very different: e-shop, e-mail, information services provider, e-auction, value-chain services provider, virtual community, third-party marketplace, value-chain integrator. (Timmer, 1999) There is no established general classification, which means that there is as yet little theoretical base for business model research and application.

The aim of this paper is to point towards an agenda for building such a base. Our main conclusions are that the term business model does indeed add to our descriptive understanding of the dynamics of organization and our ability to make sound normative recommendations and is a necessary intellectual construct. We see an emerging consensus in the most recent scholarly discussions that sharpens the concept and that also brings to the forefront general issues that have largely been peripheral, implicit or assumed without exploration in the management literature, particularly the nature of “value” in a customer-driven world and the implication of the customer-provider-partner dynamic for evolving the principles for designing organizations whose core operations rely on inter-organizational links and partnerships.

Following an overview of key concepts underlying business models, this paper highlights the basic principles upon which business models can be designed and provides an example of a business model that addresses the design principles. The implementation of business models and

their design influence the way in which organizations transform their structures to meet the demands placed upon them. The contribution of the paper is in the framework for business model design and in the insight it provides into the applications of business models and their effects on organizations. It concludes with practical recommendations for business model design.

2. Concepts Underlying Business Models

“Logic” and “value” are core words in the literature on business models. Basically, the emerging consensus is that a business model is a hypothesis (i.e., a model) of how to generate value in a customer-driven marketplace. It is a highly focused “public” declaration intended to help identify and build relationships that are core to turning the model into reality. Magretta highlights the “narrative” element of business models: “The business model tells a logical story explaining who your customers are, what they value, and how you’ll make money providing them that value.” It is in this sense that we view a business model as a hypothesis to be tested in the marketplace and often subject to public scrutiny particularly by investors. Hawkins (2004) makes the interesting point that a business model may become a product in and of itself. Certainly, in the dot com era the business model was the selling point for most startups and it is very much the “brand” for such successful e-commerce firms as Amazon, eBay and Priceline.

The most parsimonious definition of business model is by Rappa (2002): it “spells out how the company makes money.” Betz (2002) similarly states that it is “an abstraction of a business identifying how [it] profitably makes money.” “A business model is a blend of three streams that are critical to the business. These include the value stream for the business partners and the buyers, the revenue stream, and the logistical stream.” (Mahadevan, (2000). Linder and Cantrell, (2001) extend their own definition of a business model as “the organization’s core logic for creating value” to its including within it: “the set of value propositions an organization offers to its stakeholders, along with the operating processes to deliver on these, arranged as a coherent system, that both relies on and builds assets, capabilities and relationships to build value.”

There are several common themes running through these conceptions. The most distinctive is the focus on “value.” The second is that they all stress that a business model is a statement of the basic “logic” of the business; it is an abstraction of propositions, articulated as claims and intentions. In some regards, this intellectual base for business models contrasts usefully with the less rigorous conception of business vision that preceded it; both of these are intended to set the framework for strategies for market innovation and/or organizational transformation. This relates to the third common theme: the separation of

business model from business strategy and also from organizational structure. The business model establishes the principles and axioms on which strategy is built. Strategy follows on from the business model and is targeted to achieve competitive differentiation. To some degree, the business model is the “what” of business innovation and strategy the “how.” As a number of commentators observe, the two terms business model and strategy are often used interchangeably. This both weakens the value of the sharp logic of an effective business model and makes it a redundant concept if it is just a variant on strategy.

The separation of business model from strategy has far-reaching impacts. The most consequential is that the *logic* of value-generation is the core of a business model; the details of how to realize that value are in the domain of strategy. Many of the dot com models were hypotheses of value-generation that may have looked accurate in the laboratory stage of the startup but were not supported in the large-scale application of the model in the marketplace. These are often referred to as “broken” models. Others were perhaps valid hypotheses but were undermined by inattention to execution. Many commentators argue that too many companies and their investors saw their business model almost as self-implementing. Strategy and execution were ignored.

An in-depth series of research studies of e-commerce retailing innovations in eight countries ranging from Australia to Hong Kong to Greece to Denmark to the United States, concludes that a clearly stated and understood business model is a prerequisite for success, but ultimate success or failure rests on the capability of the firm to customize both model and follow-on strategy to the dynamics of the market (Elliot, 2002). The case studies show very clearly that while the specifics of the business models, markets, consumer factors, and regulatory and business environments differ widely across the world, the management issues are very similar. This suggests that there is a sharp distinction between model and strategy that may be characterized as innovation plus discipline. It is a truism that many of the dot coms focused on innovation at the expense of discipline – business model at the cost of strategy.

Magretta provides one example of the distinction and its implications. After discussing Dell’s business model that transformed the basics of an entire industry and – a measure of an effective model – has turned out to be difficult to replicate, she adds that “What often gets lost in the Dell story is the role that pure strategy has played in the company’s superior performance. While Dell’s direct business model laid out which value activities it would do (and which it wouldn’t do), the company still had crucial strategic choices to make about which customers to serve and what kinds of products and services to offer.” (Magretta, 2002, page 8.) Several competitors, such as HP,

attempted to duplicate Dell’s direct sales model and failed (just as Dell failed when it moved its strategy in the opposite direction from its business model to add in-store sales). Companies and commentators often speak of “adopting” a particular business model. The term is revealing in that it implies that adoption equates to execution.

Many commentators, particularly in the business press, blur the distinction between business model and strategy. That leads to such 2005 headlines as “Wayport Unveils Its McDonald’s Hotspot Business Model.” Translated, this means that Wayport, a wi-fi service provider, has entered into a joint agreement for Waypoint and its many other wi-fi partners to offer services in McDonald’s restaurants for a fixed monthly fee. This is strategy, not model. “Winter Schedule Moves TWA Into American’s Business Model” similarly means that TWA has been integrated into American Airlines operations, with some changes to TWA’s flight frequencies and aircraft types. Both airlines operate under basically the same business practices. Business model has little to do with the integration. An announcement by AutoByTel states that it will conduct a 90-day test of a new GM online locate-to-order business model. This more deserves the term “business process than business model. “IBM Unveils Its China Business Model” equally could be restated as IBM China’s organizational plan, since the main thrust is to open new offices that operate as China IBM rather than as an international division of corporate IBM.

3. Business Model Design Principles

There are very few guidelines in the research literature on business models as to the principles for designing a business model. This is not surprising if the main criteria are those of the U.S. Patent Office: usefulness, novelty and non-obviousness. Amit and Zott identify theoretical work on value creation that provide some inputs to business model thinking (Amit and Zott, 2001, page 511). These are value chain analysis, Schumpeterian innovation, Resource-based theory, Strategic network theory, and Transaction cost economics.

They map these against four design schemes, as shown below (our table is adapted from the original) that the researchers identify from their empirical surveys: efficiency, innovation, complementarities (the firm’s bundling of capabilities and resources and its bundling of products and services) and customer lock-in. The table entries describe the degree to which the different theoretical frameworks view each of the design schemes as important for value creation. Schumpeter’s “creative destruction”, for instance, views innovation as a high value generator. Transaction cost economics, which has been the underlying intellectual underpinning of many brokerage, value-adding intermediary and business-to-business initiatives, regards innovation as of low importance.

Table 1: Principles of Business Model Design

	Novelty	Efficiency	Complementarities	Lock-in
Schumpeterian analysis	<u>High</u>	Low	Low	Low
Value chain Analysis	Medium	Medium	Medium	Low
Strategic network theory	Medium	Medium	Medium	<u>High</u>
Resource-based theory	Medium	Low	<u>High</u>	Medium
Transaction cost economics	Low	<u>High</u>	Low	Medium

The above analysis points to Efficiency and Innovation as the two main distinguishing features of successful business models. This table suggests that designers will not gain much practical guidance from strategic theory. The focus on Efficiency leads to transaction cost economics as a rich source of guidelines, but at the expense of Innovation. Schumpeterian innovation points to exactly the opposite path for design. It is a testable proposition that any business model that can successfully combine the four design themes will not fit into existing theory. In this sense, an agenda for study is the role of truly innovative business models in theory-making.

4. Transforming Organizational Structures: a missing theme

One topic that seems ignored in research on business models is the link between model and organizational form. The main question for research here is does a unique business model require a unique organizational design? From the information available on such firms as Amazon, eBay, Dell, PriceLine, Autobytel and other business model-driven companies, there is no evidence of any organizational design that differs from the main trends in large businesses. Their annual financial reports show traditional job titles for their senior executives and traditional organizational functions such as Marketing, Finance, and Human Resources. A priori, we might expect that a firm with a business model based on Schumpeterian innovation would place a high premium on flexibility (See Fulk and deSanctis (1995) for a comprehensive survey and synthesis of organizational forms designed to ensure flexibility and adaptability.) In addition, we might expect a marked shift towards “customer-centric” designs (Galbraith, 2002) with an emphasis on account management and customer relationship managers; that emphasis reflects the primacy of customer power, a power that business models aim at co-opting.

Case studies and taxonomies are a form of learning. Most research to date on business models has focused on what we can learn from the experiences of both winners and losers in the e-commerce sphere. Most of the learning to date has been about the links from model to strategy. Here, for example, eBay has provided many instructional lessons. Its CEO has spoken often of how she joined the company because she was attracted by its distinctive business model but found a situation where strategy was badly lacking. That lack was publicly revealed in the widely-reported crash of its entire Web site for 22 hours. The CEO has built many new strategic capabilities that support the business model. Can an eBay provide equal instruction about organizational form and functioning? The following sections address this question by providing an overview of applications of business models to organizations and the changes to our thinking about organizations that have ensued as a result of these business models. Following an overview of contemporary perspectives on business models, the paper concludes with implications and research and practice.

5. Applications to Organizations

A business model is not a strategy. The separation of model from strategy is both the strength and weakness of the business model concept. Its strength is its focus on what may be termed the logic of value. This is a useful addition to management thought and practice, even where the hypothesis of value-generation failed to be validated in the marketplace. See Keen (2004) for a discussion of the early Web-based commerce as an innovation laboratory, to be looked at in terms of lessons it provides rather than ratings of successes and failures. We suggest for future researchers that a fruitful extension of taxonomies of business models is to map them into taxonomies of value-generation. For example, many of the most original business models fall into a widely used category of “e-auctions.” Some of these proposed the application of reverse auctions (FreeMarket), dutch auctions (an eBay feature), blind auctions, Japanese auctions, reverse auctions, Vickrey auctions and many other exotic variants.

These “experiments” (in the sense that many of them failed) have generated a rich body of empirical studies and theoretical research. (See for example a detailed study of blind auctions and transaction cost efficiencies in financial trading (Kavajecz and Keim, 2003) and the impact of reverse auctions on U.S. Federal Government agencies’ procurement. (McCaney, 2005) (Reverse auctions are ones with many sellers and a single buyer, which contrasts with the more typical situation of many buyers, single seller). The latter article claims that private-sector reverse auctions saved FreeMarket’s clients \$2.7 billion in 2004, an average of 15 percent and that the U.S. Navy saved 29 percent for one contract.

Add to these examples Priceline’s unique quasi-bidding model for travel services, one of the most original early dot com business models and one that has been a growing success¹ and we have a rich base for assessing the dynamics of value in the customer-provider-partner relationship that underlies so many e-commerce and supply chain management value networks. The most distinctive feature of the newer business models has been their assumption that these must be symmetric; all parties must gain some new value through the relationship. This is why we described business models in general as hypothesis of value-generation *in a customer-driven world*. (Our emphasis added) Organizational literature is largely based on a business-driven world: the assumption has been that companies are defined by their production function, and must organize to optimize their costs and operations so that they can gain a differentiation in the marketplace and attract consumers. The customer is a recent invention.

It may seem unconventional to speak of the customer as an invention but in the world of regulation and oligopolies most industries did not have customers, only subscribers and consumers. Keen (2004) defines a customer:

1. Customers have choices
2. They have the information to evaluate options and locate deals
3. They have the confidence to make those choices
4. No one can block them from exercising their rights to make their choice
5. No one can prevent new entrants offering new choices.

When all of these factors apply, as they do in e-commerce and such sectors as mobile phones, travel bookings and financial services, companies must think carefully how to balance value to the customer with value to themselves. Business models are a vehicle for addressing this balance. Up through the 1980s and in many instances through to the new century, industry boundaries were tightly defined, either through regulation (banking, telecommunications), industry structure, advantages of scale, and barriers to new entrants (automotive, pharmaceuticals), so that “consumers” largely had constrained choices, and the main challenges to the organization were its own internal structures, processes and administrative coordination. The structure of an industry often meant that information was available to intermediaries, such as car dealers and travel agents, but not to customers. In the early days of such deregulation as long distance phone service, customers had choices but lacked the confidence to make them and thus stayed for a time with the previous monopoly provider.

¹ Priceline reported \$50 million in profits for fiscal 2004, a 57 percent increase over 2003.

“Value” in this business- rather than customer-driven context means value to the company as the goal, with that value depending on consumer satisfaction. Cost, market share and price were the main variables of value management. Relationships with suppliers were very much based on bargaining and contracts, with power customers playing off suppliers and vice versa. (See Dyer (1996) for a discussion of this power game in action in the automotive industry and the start of a move in Chrysler to move to a win-win rather than win-lose relationship.)

The primacy of this perspective in which the customer plays a relatively passive role as a buyer and suppliers are just suppliers is apparent in Michael Porter’s influential value chain framework. (See Porter (1994) for his own synthesis of the evolution of his thinking on competitive strategy, which aimed at fusing what he describes as the two main and contrasting views of strategy, one that emphasizes organizational differentiation via what is now termed core competencies and one where “competitive advantage was defined by a single variable: cost.”) Porter’s own conclusion is that strategy “must begin by declaring a clear goal for the enterprise: in my view, this should be superior, long-term return on investment.” (Porter, 2004, page 251). Out of this perception came his five forces of industry model, followed by the value chain. One of Porter’s most central tenets hints at one reason for the emergence of business model conceptualization: “the fundamental unit of analysis for developing strategy is the industry.” (Porter (1994, page 290).

Put together the industry and the goal of ROI and there is no analytic or normative need for the business model view. The industry as given is in effect the business model. Moreover, there is a relatively fixed amount of value to be shared out among competitors. For example, the number of cars to be purchased in a country establishes the value boundaries for auto makers, dealers and parts suppliers. Each of them will use strategy to optimize their operations and create some differentiation that increases their share of the value pool.

The need for an additive, complementary and even conflicting view of value generation emerges if the industry is not taken as a given. In the case of e-commerce, many of the most successful innovations do not fit into traditional industry categories. eBay and Google are examples. In addition, much of the reason for many companies to explicitly define a business model is to create an innovation that either disrupts an existing industry (Priceline is an obvious example) or creates a new niche that does not directly fit into the existing industry structure. AutoByTel is a typical example here; it is both a car dealer, wholesaler, broker and information service. Its business model is to create new (1) customer value by providing information and also accessing the best deals for them, (2) partner value through bringing opportunities to dealers, lenders and other service providers, and (3)

company value by building transaction fees. The logic of the AutoByTel business model is to create a new value pool, exploiting the automakers’ and dealers’ strategies: new models, pricing, advertising and distribution.

Netflix is a company that, like eBay, opened up a new value space and created a niche through its simple but ingenious business model of subscribers renting videos via the Net in a way that reversed the store front strategy of such companies as Blockbuster; the company comes to the customer instead of the customer having to pick up and return items to the store. Netflix now faces competition from Amazon, for whom Netflix’s strategy for delivery, pricing and operations can be quickly incorporated into its own online customer interface and processing platform, and until recently from Wal-Mart, which implemented a low price service that it abandoned because it was unable to build the scale it needed; it handed over its subscriber list to Netflix, presumably to ward off Amazon. Given Wal-Mart’s immense capability base and track record, Netflix’s success reflects a business model rather than business strategy edge.

What is the industry that combines Blockbuster, NetFlix, Wal-Mart and Amazon? It does not seem useful to use the term “industry” here. Kim and Mauborgne (1999) point out that a business model can create an entirely new market space through mobilizing customers for a new type of product or service. “Mobilizing” means attracting and keeping customers and partners, which depends on the value the business model offers to customers compared with alternate choices.

The experiences of e-commerce seem to point to a conclusion: A company within an industry needs a strategy; a company aiming at becoming a new entrant, bridge industries, or create a new market space needs a business model first. A company within an industry that sees a major need or opportunity to transform itself will need to articulate those changes through a business model. That model in all these instances must provide a convincing logic of value-creation.

6. The Role of a Business Model

Business models are generally a feature of startups, for the simple reason that they need a convincing logic and narrative. There is no real evidence of established companies announcing a new business model. They publish instead announcements of strategic shifts. Some writers on the topic do look retroactively at such companies as Wal-Mart, Microsoft and Southwest and review their business models. But this does not seem a useful or instructive exercise, since as Porter so strongly argues, it is strategy that drives these firms. Only if their leaders were to decide to radically change the direction of the company would they need a new business model. Only then would outsiders be interested in hearing about it. For instance, reviewing Wal-Mart’s business model in use

today does not throw much light on either Wal-Mart or what a new company might do. Perhaps a way of bridging the gap between business model and strategy is to recognize that an effective business model must first be supported by effective strategy and over time become embedded in the strategy. McDonald's, Wal-Mart, FedEx, Cisco and Dell were built on their founder's insights that were crystallized in what was clearly a business model (Michael Dell appears to be one of the earliest chief executives to use the term). Now the model is still the reference point for strategic planning but just that: a reminder of the founding principles – and the logic of value-generation.

This suggests that, as Magretta states, there is a public narrative element to business models and that they serve a different purpose than a comparable statement of strategy (Magretta, 2002). The audience for these narratives is often the investment community, who tear apart the logic of the model and the detailed economic justification of its value-generation. In other instances, it is the base for building a culture and for getting everyone on the same page. This suggests that there may be a fruitful link in assessing the role of business models in terms of stories being the “lifeblood” of an organization. (Mitroff and Kilmann, 1975). Boje (1991) states that organizations are essentially story-telling systems. Siehl and Martin (1982) argue that stories are key indicators of underlying cultures and that socialized members of an organization are knowledgeable about its main stories. Stories are scripts in organizational settings (Martin, 1982). Quinn and McGrath view stories as part of the transformation of organizational cultures (Quinn and McGrath, 1985).

Most of the literature on story-telling discusses stories that emerge within the organization. A business model may be thought of as a story that helps build and motivate an organization. In this context, it is noteworthy that many of the radical innovations in business are associated with well-known stories. Examples are Taiichi Ohno visiting U.S. supermarkets and realizing that here was a key to transforming car manufacturing through just-in-time inventory, Michael Dell working out of his University of Texas dormitory room and realizing that the world of personal computers must inevitably move from high-tech premium product to commodity, and Pierre Omidyar, the founder of eBay, talking with his fiancée about her collection of Pez dispensers and wondering if the Web might open up new opportunities for collectors to find items.

7. Business Model Uniqueness

One of the more interesting aspects of business models is that they can be patented in the United States. Many observers regard this as either a loophole in the patent system or a dangerous misuse of it, or both of these. Others argue that it is a necessary protection of intellectual

property that encourages innovators and entrepreneurs. To obtain a patent, applicants must demonstrate that their invention is useful, novel and non-obvious over “the prior art.” It must also fall into one of four categories of subject matter: machines, articles of manufacture, compositions of matter, and business methods. Business models fall into the fourth category.

Business method patents are relatively recent. They were first recognized by the U.S. federal courts in 1998. Since most business methods have been in use for twenty years or more, there are few “novel” inventions to make a claim for, except for Internet-based business methods. There has been a flood of these. Priceline patented buyer-drive online reverse auctions, Amazon its one-click method, and Sightsound patented its “method for transmitting a desire video or audio digital signal stored on a first memory of a first party to a second memory of a second party.” It then sued music retailers who sell downloads and demanded royalties from mp3 music providers. Google, which was one of the pioneers of online search engines, was sued by a small company that had patented a “system and method for influencing a position on a search result list generated by a computer network search engine.”

Much of this appears bizarre but the patents get awarded and there are as many defenders as opponents of the patent criteria. The more general issue it highlights is that business models may be a form of intellectual property and have an economic value if they pass the test of useful, novel and non-obvious. In 2003, Netflix was awarded a patent for its online DVD subscription service. The patent covers the firm's value-generating processes. It provides a significant challenge to other companies already in or known at the time to be planning to enter the online market, including Wal-Mart, Blockbuster and Amazon. Many commentators expect that Netflix will be acquired, with its patent its major asset.

Usefulness, novelty and non-obvious would seem to be an appropriate test of the value of a business model, regardless of the patent issue. Zott and Amit conclude from their survey of that the more efficient the design of a business model (appropriation of value to the company through four design “themes”) and the more its novelty, the greater the value appropriated to the “focal” firm. (Zott and Amit, 2002).

8. A Framework for Design

One question that to date has had not been widely explored in the literature on business models is when does an established company need to define a new model rather than a refinement in or redirection of strategy? This is a consequential executive choice. Our line of reasoning throughout this paper has been that a business model establishes first order principles and that strategy is the second order derivative of imperatives for action. To

redefine an existing business model therefore is likely to be more disruptive and challenging than changing strategy.

It is accordingly rare to find an explicit statement by a CEO of plans to change the business model of the firm, even when it is facing major competitive problems. One example of a leader who did indeed announce a change to the business model is Lou Gerstner's repositioning of IBM at a time when it was failing badly and was seen as a disaster in the making. IBM's value-generation had for almost a century rested on its proprietary systems and tight relationships with corporate customers. Gerstner announced that the firm would in future move to open systems and wider collaborative relationships, including with competitors, and become as much a services provider as a hardware/software builder. Asked what his "vision" for IBM was, he stated that he did not have one. (Gerstner, 2002) A vision is not a business model.

The business model shift that he announced certainly moved IBM in an entirely different direction from its historical strategy and has provided the first order principles on which he and his successor have evolved new strategy, including buying a large consulting firm, adopting the Linux open source operating system, and licensing its previously closely protected patents. By contrast, analyses of two other failing businesses that like IBM had dominated their ecosystems for decades, were household names and had been models of performance do not address their business model but focus on strategic missteps. The two are Sony and General Motors, whose efforts between 1995 and 2005 to stem loss of market, profit crunches and anemic or even negative sales growth had all failed. No commentator challenged their business models. Sony's rests on continued product innovation and wide variety of products; its strategic missteps were summarized bluntly by the newly-appointed CEO as "the silos were not the slightest bit interested in coordinating and there was no one there to coordinate." (Schlender, 2005) GM's business model is to build production volume to spread its fixed costs, leverage its scale and dealer network, and attract customers through a wide range of car and truck models.

Here then is the fundamental issue for large organizations committed to transformation: Should the business model or the business strategy be the focus of initiative? We present below a framework that may help companies in answering it. It is a conceptual model of global sourcing of talent and capabilities, developed from a wide range of studies of e-commerce and international business. (Keen 2004, 2004a, Williams and Keen, 2005). We use it here to help sharpen the distinction between three levels of perspective on the vexed topic of outsourcing: operational tactics, business strategy and business model positioning.

Operational tactics handle outsourcing as a make-buy, largely cost-based option. Commentators here draw

heavily on transaction cost economics. The choice of in-house operations versus outsourcing fits well in that theory, trading off purchase costs and coordination costs. The business strategy level of analysis is more radical and often involves contracting for a services provider to take over a whole function, such as back office administration and data centers. The strategic emphasis here is often on core versus non-core activities.

The Global Capabilities Sourcing (GCS) framework reframes "outsourcing" as a more general business model issue. (The logic behind the model is presented in (Keen 2004a). This logic suggests that coordination technology built around Web services is opening up new opportunities for organizations to access services across the globe via standardized product and process interfaces. (Williams and Keen, 2005)

It also creates the opportunity for companies, cities and regions that are physically small to become "e-Big." It is now routine for teams of computer programmers from Eastern Europe and the old USSR to make their living working remotely for foreign companies. Research teams similarly link to customers anywhere. Intellectual talent is now relatively location-independent.

The pressures of deregulation and trade liberalization plus overcapacity are increasing commoditization and eroding operating margins in more and more industries. The demographics of developed nations are increasingly unfavorable for business growth: an aging population with high labor cost burdens. The burden is not just the direct cost of wages and salaries but the additional employer payments for payroll taxes, retirement, welfare and healthcare. GM, for example, pays manufacturing workers around \$20-30 an hour but the total burden is over \$60 an hour. Germany similarly carries heavy social payments added to direct wages.

The education systems of the rest of the world have caught up with Europe and North America. India (the fourth largest country in pharmaceutical research) and China are graduating 2-20 times the number of students in technical fields as the U.S., where half of all advanced technical degrees are earned by foreign students who are increasingly either staying in their home countries or are discouraged or blocked from applying to U.S. universities because of visa delays and restrictions imposed post 9/11.

"The China Price" has made many industries' costs untenable. The China Price is a cliché coined in the mid-2000s that equates to "whatever your own price is, less 30 percent." They have little choice but to find new sources of lower cost, high quality capability in order to remain competitive.

Combine all these factors – the problem of costs and the China Price plus the opportunity opened up by coordination technology to move the work to where the people are instead of the other way round, the eBig supply of skills, a plus large global pool of well-educated labor,

and the result is a new segmentation of global business, as shown in the figure below.

Figure 1: Global Capability Sourcing

		Labor Cost Burden	
		Low	High
Skills	Premium	1. Specialist Services	4. Creative Economy
	Commodity	2. Assembly Economy	3. Outsourcing Crisis Generator

1. Specialist services offer premium skills at (for now at least) a low cost burden. Engineering, research, architectural design, electronic records management, computer systems development and operations, drug testing, telemarketing..... The list grows. Cost is obviously a key factor here but it is the quality at low cost that is the main attraction. Many specialist services firms combine low labor costs with low overhead because of their specialization. Flextronics, for instance, is the contract manufacturer whose production is larger than the sales for most of the consumer electronics and computer hardware brands for whom it is the manufacturer, assembler and in many instances design partner. Its overhead is in the 2-3 percent range versus the more typical 15-20 percent for its customers. Such firms take on much of the business risk of their clients, converting the fixed costs of their in-house manufacturing to a variable cost pay-as-you-go. One example here is Magna Steyr, the Austrian-Canadian firm to whom BMW contracted the total manufacturing of its X3 sports SUV, saving \$1 billion in capital investment and five years of lead time. This is less the area of outsourcing, which tends to mean “out of sight, out of mind and off my budget” than co-sourcing: collaborative agreements to share tasks and responsibilities, with the company concentrating on its own priority tasks and using its premium skills. In doing so, it is in many ways insourcing rather than outsourcing capabilities. BMW insources Magna Steyr’s industry leading production engineering and quality control so that it can focus its own resources on design engineering.

2. The assembly economy is the sad area of many lesser developed countries. Here, low cost workers handle commodity tasks. Many of the widely-reported abuses of workers in the textile and apparel industry reflect the fact that this segment is price-based with no premium offer to add. Every month, there is a buyer looking to cut prices and a factory having to do so to stay in business. It is interesting to note how China, which has been the main beneficiary of the World Trade Organization’s removal of all tariffs on apparel goods for its members, has responded

to the threat of new restrictions being imposed on it after its exports to the U.S. increased by as much as 1,000 percent in some categories in the first three months of the new regime. It is moving out of the bottom end of the market – the \$3 t-shirt and bundle of six pairs of socks for \$2. It will leave that to the low cost assembly economy of such countries as Bangladesh and El Salvador. China’s edge is quality and education, not just cost.

3. The outsourcing crisis creator is the sad area of many developed countries: high labor cost burdens for commodity skills applied to commodity tasks. A commodity task may be defined as one that can be learnt in weeks and that is a strong candidate for automation: back office administration is the obvious example, along with routine telemarketing, machine-tending and customer phone service. These are jobs that are increasingly also candidates for contract- and price-based outsourcing to specialist services, wherever those may be located. It is distressing to many IT professionals to hear much of their own work described as “commodity” in nature but many activities are just that. They can be well-handled by educated foreigners who often earn one tenth the amount they do. Where the labor burden is high, these jobs will be moved and new ones not created to replace them. Germany, for instance, has not generated a net increase in manufacturing workers in over a decade.

4. The fourth quadrant is the Creative Economy, our term that parallels the concept of the Creative Class (Florida, 2002). Florida claims that in cities and regions of the U.S. that are dominated by design companies, researchers, the arts, higher education, media firms and other creative communities, earnings are around 35 percent higher than the average. The corollary of this is that the only way a company can escape the commodity trap of eroding margins, the China Price and the outsourcing crisis creator is to be part of the Creative Economy: design, invention, innovation and skilled customer relationships and experience-building. That is how high labor cost burden areas can maintain their standard of pay and living. The alternative is to narrow down the business model and focus on creating roles as specialized services as part of a value complex. Maga Steyr is part of BMW’s value complex or value web, for instance. (We prefer the term complex because such supply chains as, say, that of Dell involve multiple procurement, production, distribution and service webs.) The Creative Economy is closely tied to the other cells, especially specialized services. Apple, for example, is a design company not a consumer electronics manufacturer that co-sources and outsources many functions. HP takes this to an extreme with its printers, by far the most profitable of all its products. HP neither makes nor repairs

its printers. Contract manufacturers make them and UPS picks them up and services them in UPS warehouses.

The GCS framework is evocative in its implications for business model versus strategy. If our analysis is correct, many firms will soon find that their existing model is not sustainable in the longer-term. Many are stuck in Cell 3 – the outsourcing crisis creator – and, as suppliers, vulnerable to the specialist services innovators. They are vulnerable as producers to commoditization. They are in a value-eroding not value-generating position. The question that the framework raises is what role does a particular company most effectively play in the global sourcing economy? Many of the most effective business models of the past two decades have been ones where a company builds a distinctive role in an expanding company/customer/business partner complex, often by surrounding a commodity transaction with value-adding services. UPS is one example of surrounding the basic package delivery with third party logistical services that include repairs, financing, international customs and payments, and many others. Consumer electronic and cell phone manufacturers are extending their value web roles by allowing 60% of their products to be made by third parties.

Regardless of the specific applicability of the GCS framework, it highlights the major difference between viewing sourcing as a tactical matter, a strategic option or the basis for a new business model. The choice of perspective is a choice of transformation target and opportunity: tactically transform selected operations costs, strategically improve overall company efficiency, or redefine identity, roles and value complex/web.

This choice of transformation response has profound implications for the structure of organizations. Modern businesses are increasingly sourcing processes to and from other organizations, often located in different parts of the world. The concept of the value web has come to denote a demand-driven organization that re-configures its business partner relationships to adapt to changes in customer demand and/or economic conditions. This nonlinear form of organization needs to be able to coordinate increasingly dispersed processes, while continuing to create value.

9. Summary and Conclusions

While it remains very fragmented, the work on business models provides the basis for practical recommendations for business model design. We distil the key insights from the analysis of this paper into the following recommendations for business model design:

1. An effective business model is rigorous in its value logic. The role of the many forecasts, figures and spreadsheets that typically feed into business model planning is to provide grounding for the hypothesis of value.

2. Business models are a narrative. They must be simple in their statement and help to mobilize relevant stakeholders. These may include investors, customers, suppliers, and other partners.

3. The Patent Office criteria are relevant to testing the worth of the business model: usefulness, novelty and non-obviousness. A “model” that fails these tests is part of business strategy and should be addressed as such.

4. Business models should separate model from strategy but ensure the links to strategy. If that separation cannot be made, then again this is the domain of traditional strategic planning.

5. The most effective business models will be industry-independent, though their initial embodiment in strategy may be industry-specific. The most powerful business models will be those that provide an immediate target of opportunity but that permit the longer-term opening up of larger and broader market spaces in which to create value complexes.

This paper has examined the concepts underlying business models and how they transform organizations. It has provided guidance as to how to construct viable business models. It proposes that transformation of organizational structures are the missing link through which business models may make a real contribution. By addressing this missing link, this paper provides an overview of applications of business models to organizations. It highlights changes to organizations and competitive ecologies that have ensued as a result of these business models.

10. References

- [1] Afuah, A. and C. Tucci, *Internet Business Models and Strategies*. Boston: McGraw-Hill Irwin, 2001
- [2] Amit, R. and C. Zott, “Value Creation in E-Business.” *Strategic Management Journal*, Vol. 22, pp 493-520, 2001
- [3] Betz, F. “Strategic Business Models.” *Engineering Management Journal*. Vol. 14 No. 1, pp. 21-34, 2002
- [4] Boje, D. “The Storytelling Organization: A Study Of Story Performance In An Office-Supply Firm.” *Administrative Science Quarterly*, Vol. 36 pp. 106-126, 1991
- [5] Brandenburger and Nalebuff, 1996
- [6] Davidow, W. and M. Malone, *The Virtual Corporation: Structuring and Revitalizing the Corporation for the 21st Century*. New York: HarperBusiness. 1992
- [7] Dyer, “How Chrysler Created an American Hieretsu.” *Harvard Business Review*. July-August pp. 1-12. 1996
- [8] Earle, N. and P. Keen. *From .Com To .Profit: Inventing Business Models That Deliver Profit And Value*. San Francisco: Jossey-Bass. 2000
- [9] Elliott, S. (Ed.) *Electronic Commerce B2C Strategies and Models*. Chichester: John Wiley, 2002

- [10] Florida, R. *The Rise of the Creative Class*. New York: Basic Books. 2002
- [11] Fulk, J. and G. DeSanctis "Electronic Communication for Changing Organizational Forms". *Organization Science*. Vol. 6. No. 4. pp 337-349. 1995.
- [12] Galbraith, J. *Designing Organizations*. San Francisco: Jossey-Bass, 2002
- [13] Gerstner, L. *Who Says Elephants Can't Dance?* New York: HarperCollins. 2002
- [14] Hawkins, R. "Looking Beyond The Dot Com Bubble: Exploring The Form And Function Of Business Models In The Electronic Marketplace." In B. Preisel, H. Bouwman and C. Steinfeld (Eds.) *E-Life After The Dot Com Bust*. Heidelberg: Physica-Verlag, 2004
- [15] Kavajecz, K. and D. Keim. "Packaging Liquidity: Blind Auctions and Transaction Cost Efficiencies." Wharton School working paper reprints. 2003
- [16] Keen, P. "A Manifesto for Electronic Commerce." Bled Electronic Conference: 2004.
- [17] Keen, P. "Building New Generation E-Business: Exploiting the Opportunities of Today." In B. Preisel, H. Bouwman and C. Steinfeld (Eds.) *E-Life After The Dot Com Bust*. Heidelberg: Physica-Verlag, 2004a
- [18] Kim, W. and R. Mauborgne. *Blue Ocean Strategy: How to Create Uncontested Market Space and Make Competition Irrelevant*. Cambridge: Harvrd Business School Press. 2005
- [19] Kiley, D. "GM Tries to Cut the Cord on Costly Rebates." *USA Today*. January 24, 2004
- [20] Linder, J. and S. Cantrell, "What Makes a Good Business Model, Anyway?"
- [21] Magretta, J. "Why Business Models Matter." *Harvard Business Review*, 2002
- [22] Mahadevan, B. "Business Models for Internet-based E-commerce." *California Management Review*, Vol. 42 No. 4 pp. 55-69, 2000
- [23] Martin, J. "Stories As Scripts In Organizational Settings." In: A. Hasdorf and A. Isen (Eds.) *Cognitive Social Psychology*. New York: Elsevier-North Holland (pp.255-305), 1982
- [24] McCaney, K. "Reverse Auction." *Government Computer News*, Vol. 19 No. 13, pp. 1-3, 2000
- [25] Mitroff, I. and R. Kilmann. "Stories Managers Tell: A New Tool For Organizational Problem Solving." *Management Review*, July pp. 18-28. 1975
- [26] Parolini, C. *The Value Net: A Tool for Competitive Advantage*. New York: John Wiley, 1999
- [27] Porter, M. "Caught in the Net." *Interview, BusinessWeek Online*. <http://www.businessweekonline.com>. August 27, 2001
- [28] Porter, M. "From Strategy to Advantage: The Evolving Competitive Paradigm." In Duffy, P., *The Relevance of a Decade*. Cambridge: Harvrd Business School Press. 1994
- [29] Quinn, R.E. *The Intelligent Enterprise*. New York: Free Press. 1992
- [30] Quinn, R.E. and M.R. McGrath. "The Transformation of Organizational Cultures: A Competing Values Perspective." In R. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg, and J. Martin (Eds.). Beverley Hills: Sage. pp. 315-334, 1985
- [31] Rappa, M. *Managing the Digital Enterprise*, Web site courseware. <http://www/digitalenterprise.organization/models/models.html>
- [32] Schlender, b. "Inside the Shakeup at Sony." *Fortune*. March 21, 2005. pp. 120-127
- [33] Schumpeter, J.A. *Capitalism, Socialism, And Democracy*. Harper: New York, 1942
- [34] Siehl, C. and J. Martin. "Learning Organizational Culture." Research Paper 654, Stanford Graduate School of Business. 1982
- [35] Spector, R. *Amazon.Com: Get Big Fast*. New York: HarperBusiness. 2000
- [36] Tapscott, D. and A. Caston 1993. *Paradigm Shift: The New Promise of Information Technology*. Boston: McGraw-Hill Irwin. 1993
- [37] Timmers, P. "Electronic Commerce Strategies and Models for Business-to-business Trading." Chichester: John Wiley. 1999\
- [38] Williams R. and P. Keen "Business Capabilities Versus Industry Strategy: Value Generation Not Value Sharing", working paper, to be published by Abo Akademi, 2005.