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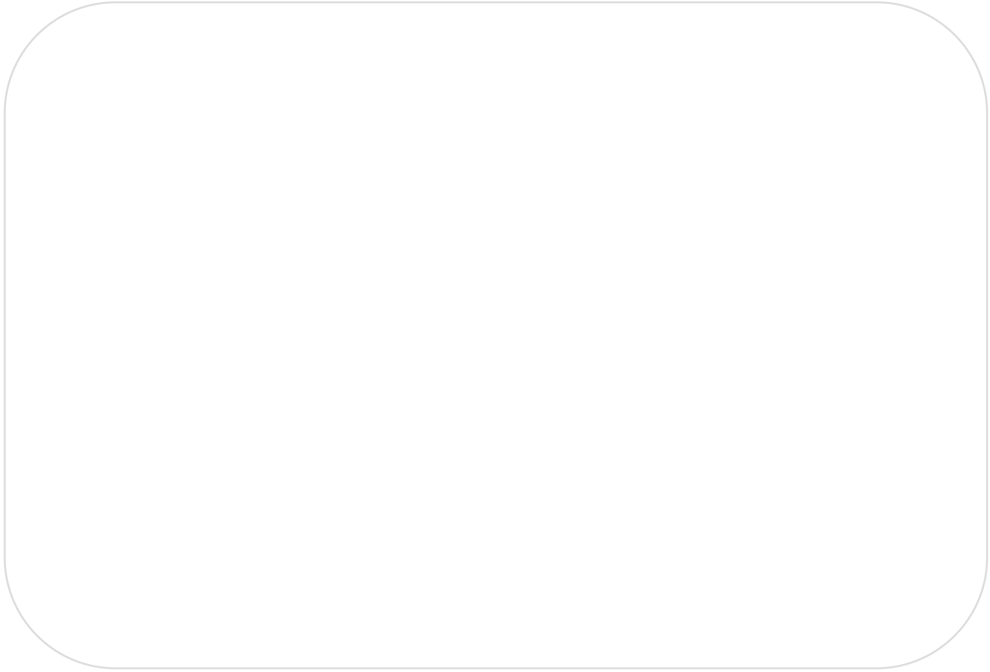

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The Wheel of Business Model Reinvention: How to Reshape Your Business Model and Organizational Fitness to Leapfrog Competitors

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In today's rapidly changing business landscapes, new sources of sustainable competitive advantage can often only be attained from business model reinvention, based on disruptive innovation and not incremental change or continuous improvement. Extant literature indicates that business models and their reinvention have recently been the focus of scholarly investigations in the field of strategic management, especially focusing on the search for new bases of building strategic competitive advantage, not only to outperform competitors but to especially leapfrog them into new areas of competitive advantage. While the available results indicate that progress is being made on clarifying the nature and key dimensions of business models, relatively little guidance of how to reshape business models and its organizational fitness dimensions have emerged. This article presents a systemic framework for business model reinvention, illustrates its key dimensions, and proposes a systemic operationalization process. Moreover, it provides a tool that helps organizations to evaluate both existing and proposed new business models.

Introduction: relevance of business model thinking and change

The extant literature in strategic management illustrate the increasing need of enterprises to achieve sustainable competitive advantage in the increasingly turbulent and unpredictable business landscapes of the 21st century. In addition, there are many analyses and discussions of how technology and the "new economy" have changed traditional business models in many industries, ranging from hi-tech to commodity industries. However, there is little consensus of what new business models really mean, and especially how they are created, evaluated and sustained. It is evidently important to

develop frameworks and guidelines in this regard, to assist organizations in utilizing resources effectively for survival and new bases for future wealth creation.

Every organization has a business model, simply described as its "way of doing business" or its "business concept" so that it can sustain itself.[1] The rapid-changing business environment of today has brought about numerous new business models in addition to reinvention of existing ones. This creation and reinvention of new business models, and not just continuous improvement, are now being regarded as providing the disruptive competitive advantages necessary to survive and thrive in an environment where the 'rules of the game' change quickly in almost all companies and industries. The challenge for companies, therefore, is to develop frameworks of how new business models and new industries emerge, and tools to enable managers to develop new business models and their accompanying organizational fitness requirements.

This paper, first, reviews the driving forces in the environment that provides pressures for new business models; second, indicates the relevance of reinvented business models for competitive advantage; third, outlines the particular challenges for industry incumbents in developing new business models; fourth, compares the various views of the concept of new business models and identifies its generic components; next, provides a systemic framework for new business model reinvention; and finally, proposes a tool for operationalizing and evaluating a new business model.

The driving forces for new business model development

Where the industrial era's environment was relatively stable and simple, today's companies are operating in a landscape of continuous and complex change. Hamel[2] has termed it the "age of revolution" – where change is no longer additive, but "discontinuous, abrupt, seditious". Prahalad and Oosterveld[3] use the term "competitive discontinuity" and define discontinuity as an abrupt change.

These abrupt changes, mainly driven by advanced technology, knowledge-networking and globalization, has created a competitive landscape with substantial uncertainty and

unpredictability. The resulting new socio-techno-economic environment is one that challenges the essence of relatively stable business models that firms use to achieve their particular goals.

The major driving forces behind the rapid and unpredictable change in the business environment include the following:

- *Deregulation and Privatization*: where local monopolies are removed it allows companies and industries to exploit global opportunities by collaborating with companies outside their home country to gain access to capital, technology, skills, innovative capabilities, and other resources in industries that have been mostly local.[4]

- *Technological Change*: significant improvements in the areas of communication and information technology have resulted in increased connectivity, facilitated transmission of large amounts of information, and low cost in processing information. This technological advancement prompts a wide array of options for businesses in terms of how, where and when to find and seize opportunities. As a result, technological innovations create new market opportunities.[5]

- *Globalization*: viewing the world as a single market has created substantial uncertainty in the competitive landscape by bringing about fundamental changes in the traditional boundaries of nations, industries, and companies. And such changes continue to challenge the traditional rules of competition.[6]

These driving forces, together with changing competitive relationships, have removed the certainty and stability in the economic environment from almost every industry. Consequently, the competitive landscape has undergone a fundamental change. The newly emerging environment has three major distinguishing features:[7] it is vastly globalized; it favours intangible things (ideas, information, relationships, knowledge); and it is intensely interlinked within ubiquitous networks. These three attributes produce a new type of marketplace and society often termed the “new economy”, “knowledge economy”, or “networked economy”.[8]

The 'new economy' and impacts

There are overlapping discontinuities that differentiate the "new" economy from the "old", and understanding their characteristics is essential for transforming businesses to be successful. These discontinuities include:

- *Digitization, Virtualization and Networking*: Networks and digitized information make it possible for copious amounts of information to be compressed, stored, retrieved and transmitted instantly from around the world. This results in the availability, and easy accessibility, of information across the world and gives everyone instant access to each other.[9]

  As information shifts from analog to digital, physical things can become "virtual".[10] Although "place" is still important (real-time face-to-face meetings retain their value), organizations increasingly operate in a "space" (i.e. an electronically created environment), where more and more economic transactions are taking place.[11]

  With networking, the new organization is a web of relationships in which the boundaries inside and outside are permeable and fluid. Such networks break down the traditional boundaries that existed among companies and their suppliers, customers, competitors and other stakeholders. This enables companies to collaborate and gain the advantages of independence, speed, and flexibility in relation to changing market needs.[12]

- *Industry Convergence*: Many traditional industry boundaries are disappearing or substantially changing, with the pressures to 'converge' reshaping most industries. Consequently, convergence has resulted in industry structures that are fundamentally different from traditional ones. The convergence in industries such as in computing, telecommunications, and consumer electronics and also in investment, insurance, and banking industries are changing the way companies do their business. These changes suggest that the business models developed to

compete within a traditional industry structure become irrelevant in the new, evolving industries.[13]

- *Deconstruction*: Evans and Wurster define deconstruction as the "dismantling and reformulation of traditional business structures" resulting from two forces: "the separation of the economics of information from the economics of things, and the blow up (within the economics of information) of the trade-off between richness and reach".[14] When these two forces take place, there is no longer a need for the components of traditional business structures of organizations and value chains to be integrated. These deconstructed pieces fragment into several businesses that have separated sources of competitive advantage, or recombine to form new business structures. Therefore, this process of deconstruction challenges the competitive advantages that depended on traditional business structures.

- *Knowledge and Innovation*: In the global economy "knowledge knows no boundaries" as knowledge permeates through people, products, and organizations.[15] It is an economy which shows a shift from the industrial-based to a knowledge- and information-based economy. Accordingly, organizations are relying more on intellectual (intangible) assets and less on the physical (tangible) assets that were important to the industrial age.[16]

  This economy is also characterized as an innovation-based economy with human imagination and ingenuity a main source of value. Given the increased pace of change and complexity in the business environment, there is a need to constantly innovate to keep ahead of imitating competitors.[17] Additionally, each innovation is a platform from which other innovations can be created. It is this expanding and limitless characteristic of innovations that prompts wealth creation in the new competitive business environment.[18]

- *Mobility and Value Creation*: In the knowledge-networked economy, mobility has a significant positive impact on accelerating and increasing knowledge, innovation and value creation. Therefore, especially pioneering companies in

knowledge intensive industries, such as consulting, e.g. McKinsey, and investment banking, e.g. Goldman Sachs, are benefiting from increasing their employees mobility within their companies. Their employees are travelling extensively for intense face-to-face meetings and are utilizing advanced information and communication technology, such as videoconferencing, for increasing both dimensions, physical and virtual mobility. Next industries currently undergoing that transformation are companies within the high tech industry, such as biotechnology, e.g. Monsanto, and telecommunication, e.g. Siemens. Initiatives such as People ShareNet are established within companies like Siemens to accelerating the companies' mobility for increasing value creation.[19]

- *Prosumerism*: In many industries consumers are getting actively involved in the production process, blurring the gap that existed between consumers and producers.[20] This is known as "prosumption".[21] In such situations, the company and its customers "co-create" products and services. An important aspect of prosuming is that since customers are involved in the creation of the product/service they are more likely to be satisfied with the final result. And the firm, in turn, has customers who are in a much stronger relationship with them than before.[22] Therefore, in this process, both organizations and customers rely on the relationship they develop and maintain in creating products and/or services.[23]

- *Zero Cycles*: Discontinuity has created an era where the life cycles of products and services have become considerably shorter. The pace of business has also increased with rising customer expectations and new products entering the market at a much faster rate. Therefore, immediacy has become a key driver and variable in business success. This immediacy imposes new demands on organizations to continuously and instantly adjust to changing business conditions.[24] Succeeding to operate at this rapid pace becomes a source of competitive advantage.

- *Disintermediation and Reintermediation*: Traditional value chains were filled with intermediaries (wholesalers, dealers, and distributors) who distributed a

completed product/service. However, the economy undergoes disintermediation with the deconstruction of traditional organizational boundaries (assisted by advancements in network technology and communication), and companies are increasingly able to deal directly with end users. This helps organizations to gain sophisticated knowledge about consumers and learn more about how to better serve them. Intermediaries often become unnecessary when buyers and sellers can deal with each other directly. This process of disintermediation threatens to challenge a number of established distributors and agents.[25]

However, the "reintermediation" opportunities are much greater than the disintermediation threats,[26] since network technologies, in actuality, generate new intermediaries. Kelly[27] explains that "[t]he more connections there are between members in a net, the more intermediary nodes there can be. [Therefore], everything in a network is intermediating something else". Hence, disintermediation can create opportunities for new and different middlemen.

Such major shifts in the business environment as described above have changed many traditional industry structures and sources of competitive advantage. These changes suggest that organizations have to change their business models in order to sustain themselves in the new business landscape. From the above analysis of new environmental driving forces is evident that an organization, as part of a "business ecosystem" that operates across a variety of industries,[28] should have a "systemic" perspective that is not restricted by traditional boundaries. This understanding implies that organizations need to shift from traditional (existing industry focused, mechanistic thinking) approaches of strategic management to ones that are systemic (holistic, new value configuration focused) in nature. Such systemic thinking assists organizations in developing sense making capabilities and systemic frameworks for reinventing business models.

Relevance of business model reinvention for organizations

In the rapidly-changing environment discussed above, a company should be oriented and capable of reinventing its strategy not when it is in the midst of a crisis, but

continuously.[29] After all, no matter how successful and superior a company's current business model seems to be, it will be "imitated, diluted and commoditized" by others and challenged by new business models.[30] Therefore, organizations should constantly attempt to create new business models if they hope to survive and grow in a turbulent and competitive environment.

It is also becoming increasingly difficult for companies to have their existing business models generate sustainable profit indefinitely. The key reasons include major and unpredictable changes in the business environment and the increasing importance placed on innovation and knowledge as value-creating attributes, that must be found more frequently than ever before. Therefore, the accelerating pace of the business environment and the need for constant innovation create a challenge in sustaining the efficacy of existing business models.[31]

The significance of changing the "rules of the game" in today's business landscape include being persistently innovative and imaginative in differentiating own and industry strategy (or business model); reinventing existing business models or creating new ones instead of simply improving or optimizing current business models; realizing the competitive advantage found in proactively restructuring the industry's environment through a first-mover mindset; and "experimenting" with a portfolio of strategies. These are discussed below.

Dealing with different types of innovation

Hamel[32] points out that the challenge today is to become the "architect of industry revolution", i.e. to be the creator of the kinds of fundamental change in business models that transform companies and industries through "non-linear innovation". Such innovation requires companies to come up with entirely new solutions to customer needs. This, in turn, will help to break out of the hyper-competition experienced in many industries.

There are two kinds of innovation.[33] The first is innovation regarding the firm's historic strategy (change own strategy). The second is innovation with respect to the firm's industry and its competitors (proactively reinvent the industry). Succeeding at both kinds of innovation is not easy and few companies are skilful enough to do both. This also applies to many organizations that are capable of creating radical business models but do not exist long enough to discover another strategy.[34]

From an additional viewpoint, according to Moore,[35] every business ecosystem develops in four distinct stages: birth, expansion, leadership, and self-renewal (otherwise, death). The self-renewal stage in the business ecosystem occurs when established business communities are threatened by rising new ecosystems and innovations. Therefore, companies have to work innovatively to bring new ideas to the existing ecosystem. They can do this by integrating new innovations into their own ecosystems, or they can fundamentally restructure themselves to cope with the new competitive landscape. If they cannot accomplish this, companies will be easily supplanted by others who manage to do so.

Efficiency (continuous improvement) versus radical innovation

A distinction between reengineering and reinvention is essential. While restructuring and reengineering have the aim of "wringing out" the inefficiencies and maximizing profitability, reinvention, on the other hand, requires new skills, new business models, new behaviours, new ways of selling products and services, marketing, doing business, and using new technology.[36]

The business environment is increasingly divided into two kinds of organizations:[37] those that seemingly cannot move beyond continuous improvement/innovation, and those who have made a jump to radical innovation.

Prahalad and Oosterveld discuss what they call "old remedies and new problems". [38] At the first signs of competitive difficulty, such as loss of market share, profit declines, and new competitors (new problems), managers assume cost cutting and other forms of improving efficiency (old remedies) will revitalize them. By means of restructuring

activities, managers are able to reduce inefficiencies that have accumulated over the years, but that does not solve competitiveness problems since managers keep applying old solutions to new problems. Thus, their first reaction to discontinuities is to "work harder" when what they need to do is "work differently". This is a characteristic situation of the "Red Queen effect"[39] - where the Queen comments to Alice, in *Through the Looking Glass*, that it takes all the running to keep in the same place. For companies historically locked in a Red Queen race, future sustainable competitive advantage will come only to those who are able to radically change their business models to stay ahead.

It is becoming evident that companies have to move beyond improving efficiencies to fundamentally changing their current business models. Therefore, the challenge is not whether the company can reengineer its processes, but whether it can reinvent its own and the entire industry's model.[40]

"First mover" advantage

In addition to exogenous changes taking place in the business environment, such as technology and the global landscape, firms often have the ability to proactively reshape the boundaries, structure, and dynamics of their industry's environment.[41]

First movers are the first to introduce new goods or services. In doing so, they earn "monopoly profits" until competitors imitate their innovations.[42] Therefore, being early and fast movers in responding to environmental change, or being a pioneer in actively initiating change in one's environment, can give a firm a major competitive advantage.[43]

Additionally, since the network economy favours the "nimble and quick",[44] those companies and technologies that grow gradually and slowly will not be able to compete with early starters. And because of the 'law of increasing returns', not only will they find it difficult to catch up with first movers but may find it difficult to compete at all.

However, some authors, such as Bartlett and Ghoshal[45], mention there are instances where being a late mover (or secondary mover) is a source of competitive advantage rather than a disadvantage. By benchmarking and adapting competitors' business models,

late movers can learn from the demands, opportunities and challenges faced by their competitors and benefit by discovering niches overlooked by competitors or adopting different business models from that of competitors. Thus, although some distinct advantages accrue to prime movers in some instances, they often bear the "pioneering costs" while the longer term advantages could go to those who learn from the prome movers' early mistakes, or become adept emulators.[46]

Complex adaptive systems

Since the business environment is complex and unpredictable, it is not possible for organizations to generate strategy on a premeditated and deliberate basis of the company and its environment. Mintzberg[47] identifies the three fallacies in generating strategies: that prediction is possible, that strategists can be detached from the day-to-day business operations, and, above all, that the strategy-making process can be formalized.

However, with insight into complex adaptive systems and complexity theory, it is possible that amid the seeming chaos and diversity in the turbulent environment, there are underlying rules that assist organizations in self-organization and emergent behaviour. Complex systems are difficult and often impossible to predict because they exhibit major disruptions. As the environment and the strategies of competitors change, the fitness attributable to any given potential strategy will also change. Therefore, organizations should rely less on their ability to make accurate predictions and more on the "power of fitness evolution" so as to better understand business strategy. Consequently, companies should not have singular focused strategies, but a set of multiple "robust adaptive" strategies that will provide flexibility in the uncertain and unpredictable environment. [48]

The implication of the above is that before current competitive advantages from existing business models and strategies are fully depleted, companies should already be exploring new opportunities in the changing external environment and industry dynamics by creating a range of diverse strategies and new capabilities through innovation and experimentation. For example, Microsoft developed a range of strategy options to choose from when it launched its Windows program (see Microsoft box).

Microsoft

In the late 1980s, with DOS coming to the end of its useful life, Bill Gates focused on moving the industry to another Microsoft product, Windows. Appreciating the uncertainty of this restructuring point, however, he hedged his bet by also investing in Windows' competitors: Unix, OS/2, and the Apple Macintosh system. In addition, his company developed generic skills in object-oriented programming and graphical interface design - skills that would be useful no matter which system won, even if it were a complete unknown. Gates's approach of pursuing several paths simultaneously is intrinsically difficult to manage. He was accused in the press of not having a strategy and confusing customers, and it is easy to imagine that there were internal tensions within Microsoft as well.

Robust strategy differs from traditional scenario analysis in that it does not presuppose an ability to identify the most or least likely outcomes. Being robust calls for the ability to pursue a package of potentially conflicting strategies at the same time. Such a package might include big shaping bets (such as Windows), hedges (support of OS/2), and no-regrets moves that are valid regardless of outcome (building object-oriented programming skills). A robust package of strategies covers a broad array of possibilities and evolve over time, and the greater the uncertainty, the greater their value.

Source: Beinhocker, 1997[49]

It is evident that the increasingly complex business landscape requires reinvention of business models for new organizational fitness: the new business model or strategy should be one that is dynamic and robust, and which results in the reinvention of organizations and/or industries with appropriate organizational fitness capabilities.

Challenges for industry incumbents

Developing new business models requires the discarding of conventional beliefs and established ways of doing business. However, the challenge for top management in

industry incumbents (established companies in the industry, especially large ones) is to 'let go' of industry orthodoxy and lead their companies in continuously developing appropriate new business models. It is useful to recognize and understand the dilemmas and challenges faced by established companies when competing within the rapidly changing business environment.

In general, large organizations resist disruptive change partly because the kind of change being required is radical and challenging. That is, what is needed is no longer a matter of incremental change, but realizing a discontinuous transformation in both organization and industry.[50] The following describe some of the difficulties incumbents face in the new competitive landscape:

- *Limited Perspectives of Top Management*: Most leading businesses started off with an innovative competitive model that sets them apart from their competitors. This, in turn, encourages top management to focus its energies and resources on refining and extending the existing business model. Consequently, the creative thinking that brought about the company's initial success is often replaced by a commitment to the existing business model. However, when changes occur in the business environment, this rigidity brings failure to the company.[51] Sull termed this phenomenon "active inertia"- the inability to take appropriate action. Thus, the more successful a firm gets, the more entrenched its managerial routines tend to become.

  Moreover, senior executives are usually promoted from within and have strong social ties. As a result, they may not have the necessary experience for a different approach of managing. However, managers should be able to identify discontinuities, determine their impact on the market, and develop new business models.[52] This is because ultimately the business landscape has considerably changed to assume that industry boundaries and business models remain the same.

- *Unlearning the Past*: This feature follows from the above-mentioned point, in that corporate managers have "excess of rationality"[53] that causes them to disregard

important new technologies and markets. But these rational instincts are effective only when it is a matter of incrementally improving existing offerings and not in becoming drivers of industries. Christensen[54] also cites that many of what are now 'widely established principles of good management' are often only situationally appropriate.

Changes in organizations often do not occur unless it is on the verge of collapsing, or facing major disruptions. However, today the competitive landscape is changing so fast that such experiences alone have become irrelevant, and the organization has to learn how to compete in this new environment.[55] In order to accomplish this, organizations should significantly unlearn their traditional strategy mindset, way of thinking and doing, and business models in order to survive in the rapidly changing business environment.

- *Difficulty in Cannibalizing Existing Business*: Incumbents can easily become inept because of their reluctance to deconstruct their established business model (e.g. sales and distribution systems, and long-term relationships with suppliers and customers), and this hesitation becomes the greatest competitive advantage for new competitors. For this reason, companies have to pre-emptively cannibalize their own businesses to remain competitive.[56]

  Although this point may be easy to grasp intellectually, it is profoundly difficult in practice for established companies. This is paradoxical because for companies to survive and remain competitive in the knowledge and information economy, they have to cannibalize their existing business models and at the same time develop new and innovative business models while still benefiting from the existing ones. Even so, incumbents should allow Schumpeter's "creative destruction"[57] to operate, i.e. the paradox of perfecting (improving, making efficient) products and services only to destroy (cannibalizing, reinventing) them is a challenge for managers.[58] Nevertheless, it is important to realize that if incumbents are to defend themselves against competitors, they should play the roles of creator, cannibal and destroyer of their own business models.

The need for innovation and creativity has become stronger in a competitive landscape where business models have shorter life cycles. Yet there is reluctance and hesitation in established organizations to let go of traditional ways of doing their business. Incumbents tend to follow established patterns of thinking and working despite dramatic environmental changes. However, it is critical for companies to acknowledge that the way to survive and thrive in this different business landscape is through unorthodox and unconventional methods.

An example of how discontinuity in the environment can lead a company rooted in traditional business model thinking to its downfall is suitably portrayed by Encyclopaedia Britannica (see box).

Encyclopaedia Britannica

Since 1768, Encyclopaedia Britannica has evolved through fifteen editions and to this day it is regarded as the world's most comprehensive and authoritative encyclopaedia. In the 1970s, Britannica grew into a serious commercial enterprise. The content was revised every four or five years, and the company built one of the most aggressive and successful direct sales forces in the world. By 1990, sales of Britannica's multivolume sets had reached an all-time high of about $650 million. Since 1990, however, sales of Britannica have collapsed by over 80 percent. Britannica was under serious threat from a new competitor: the CD-ROM.

The CD-ROM came from 'nowhere' and destroyed the printed encyclopaedia business. Whereas Britannica sells for $1,500 to $2,000 per set, CD-ROM encyclopaedias sell for $50 to $70 with the vast majority of copies given away for free to promote the sale of computers. While the marginal manufacturing cost of Britannica is about $250 for production plus about $500 to $600 for salesperson's commission, the CD-ROM's marginal cost is $1.50 per copy.

Britannica's executives initially seemed to have viewed the CD-ROM encyclopaedia as an irrelevance, but as revenues plunged, it became obvious regardless of the quality, CD-

ROM encyclopaedias were serious competition. As sales continued to plummet, the company eventually put together their own version of the encyclopaedia.

The CD-ROM version engendered yet another crisis: the CD-ROM version of Britannica could not possibly produce the $500 to $600 sales commission its traditional counterpart produced. To avoid a revolt by the sales force, Britannica executives decided to bundle the printed product with its digital counterpart. The CD-ROM was given free to buyers of the multivolume set. Anyone who wanted to buy just the CD-ROM would have to pay $1,000. The decision appeased the sales force briefly, but did nothing to stem the continuing collapse of sales. In 1995, the company was put up for sale, and after eighteen months it was sold for less than half of the book value. In less than five years, one of the greatest brand names in the English-speaking world, with a heritage of more than 200 years, was nearly destroyed by an inexpensive, plastic disk.

Source: Adapted from Evans and Wurster[59]

Generic definition of a business model and its key dimensions

To understand the concept of new business models, it is important to comprehend exactly what a business model means and what its key features are. There are several knowledgeable case examples and analyses on how traditional business models have changed, or need to be changed, due to changes in technology and globalization. However, despite a widespread intuitive understanding, an analysis by Schmid et al.[60] reveals a confusing and incomplete picture of the dimensions, perspectives, and core issues of business models. The results disclose that there are hardly any explicit references to business models; that an understanding of business models often remains unspecific and implicit; and that consensus on the key elements of business models is lacking.

It is evident that should a company have a comprehensive and cohesive understanding of a business model and its identified key elements at its disposal, it can be a source of

competitive advantage and assist management in reinventing the company and/or their industry. As a starting point, Timmers[61] provides a useful definition of a business model as being:

- an architecture for the product, service and information flows, including a description of the various business actors and their roles;
- a description of the potential benefits for the various business actors; and
- a description of the sources of revenues.

On the basis of a general understanding of what business models seem to be, it is essential to comprehend the various key components, dimensions, and frameworks of business models.

Review and comparison of approaches to the concept of a business model

An extant literature review by the authors identified a variety of established business model definitions. These definitions are henceforth selectively analysed and compared to arrive at the generic elements of business models.

- Schmid et al.[62] distinguish six generic elements of a business model: mission, structure, processes, revenues, legal issues, and technology. When designing a business model and applying the framework, Schmid et al. emphasize that all six generic elements and the dynamics of the respective elements have to be considered.

- According to Viscio and Paternack,[63] a firm's business model comprises five elements: global core (with five key missions: identity, strategic leadership, capabilities, control mission, and capital mission), business units, services, governance, and linkages. This model defines the elements individually as well as collectively, indicating that the model must generate a "system" value in addition to the value from the individual parts. This system value establishes what should

be inside and what should be outside the organization. It additionally assists in setting the standards for performance expectations from each of the elements.

- Hamel[64] states that the elements of a business concept and a business model are the same; a business model is simply a business concept that has been put into practice. A business concept comprises four major components: core strategy, strategic resources, customer interface, and value network. Intermediating between the components are three elements (customer benefits, configuration of competencies, and company boundaries) that link and relate the major components.

As is evident from the above descriptions, there are overlapping and common elements among the components and dimensions of business models suggested by the various authors. The next section extracts the central theme from these definitions and proposes an integrated framework of business models.

Towards an integration of (generic) elements and definition of a business model

Firstly, business models consist of many dimensions and there does not seem to be a single set of dimensions of a business model that applies to all companies and to all industries.[65] However, as indicated above, it seems to be generally accepted that the model should enable the creation of value for the various participants in its value chain. Moreover, it must generate a total "system" value that is higher than the sum total value from its individual parts.

From the above analysis of various generic elements of a business model, the term "business model" can be defined as (see Figure 1):

> The particular business concept (or way of doing business) as reflected by the business's *core value proposition(s) for customers*; its *configurated value network(s)* to provide that value, consisting of *own* strategic capabilities as well as *other* (e.g. outsourced/allianced) value networks and capablities; and its *leadership*

and governance enabling capabilities to continually sustain and reinvent itself to satisfy the multiple objectives of its various stakeholders (including shareholders).

From this definition the generic elements in business models are now clear:

- new customer value proposition (which could also involve new customer base);
- a new value network configuration for that value creation; and
- leadership capabilities that ensure the satisfaction of all relevant stakeholders.

The key elements of the business model are important sources of competitive advantage in the business landscape. The components of the business model are useful bases for developing evaluation dimensions and tools for new business models, and these are illustrated as a systemic model (or framework) in the next section.

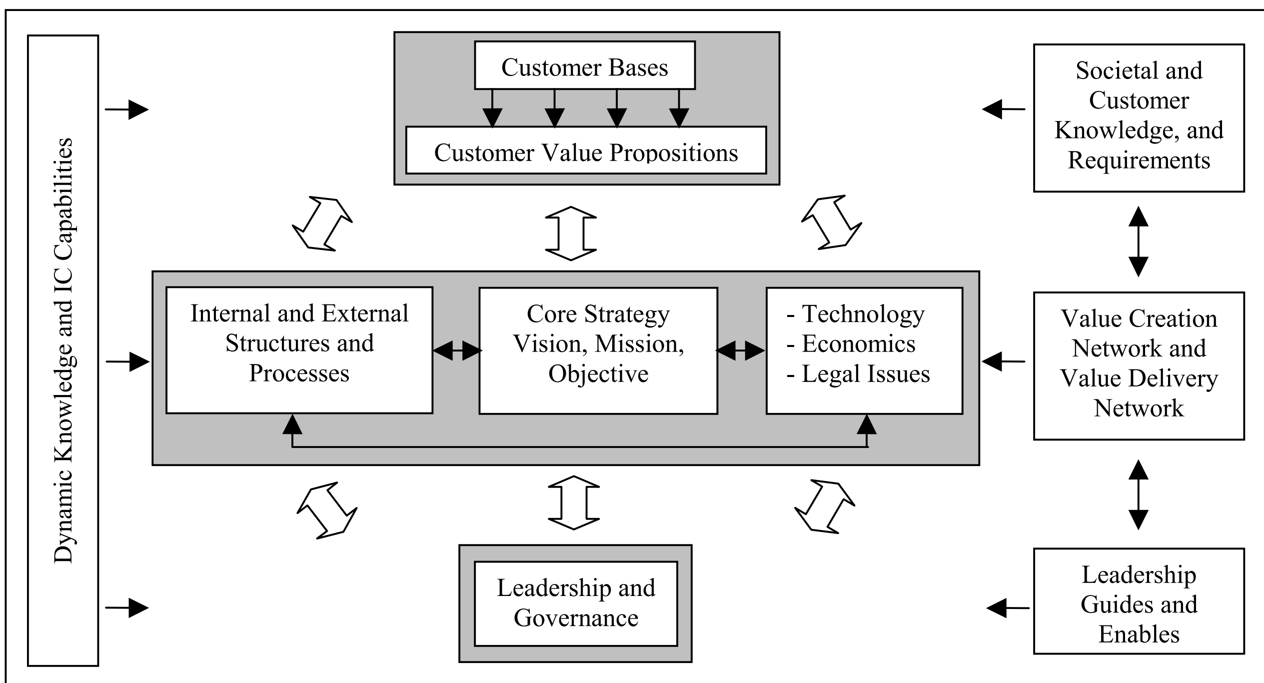

Figure 1: Key Elements of a Business Model

A systemic framework for developing a new business model

As indicated previously, traditional strategic management approaches involve a competitive orientation with companies mainly attempting to get better (or "fitter") to achieve unique positions in the existing industry. This is rooted in mechanistic, industry boundary-oriented thinking, with companies striving to continuously improve themselves ("running harder and harder"). In today's more chaotic environment, organizations should rather strive to systemically reinvent themselves ("run differently").

It is possible for organizations to reinvent themselves with systemic strategy approaches, i.e. value propositions for customers enabled by systemic new industry configurations, while still maintaining their existing business models if these are still valid and resulting in profits for the company.[66] The latter is indeed very important, as the old business model has to provide the necessary funding for the new business model experimentation and incubation, while it still has relevance to some ('old') customers and value chains. In this section a review of selected approaches to developing a new business model is first provided, and then a systemic integrated framework is proposed.

Review of selected approaches in developing new business models

Taking into consideration the challenges faced by incumbents in cannibalizing their existing business models and operating in unconventional ways, a number of authors have suggested ways to enable both new entrants and established companies to create new business models, or reinvent existing ones, in their organization and industry. Two prominent approaches are highlighted here:

- *Extended Value Chain Management*: According to Govindarajan and Gupta[67] the business model involves the areas of customer definition, customer value identification, and value chain process design. Accordingly, they have identified three highly interconnected arenas in which the rules of the game can be changed. These include the dramatic redesign of the end-to-end value chain architecture that has reduced costs and/or greatly enhanced value; transformation of the value

customers receive by providing comprehensive new customer solution(s); and redefinition of the customer base by discovering and serving previously hidden customer segment(s).

- *Drivers of Customer Value Creation*: Amit and Zott[68] propose four sources of value creation that demand equal consideration and enhance the value-creation potential of a business. These are: efficiency (e.g. increased information flows and reduced information asymmetries between buyers and sellers); complementaries of products/services as an integrated bundle of products/services; lock-in incentives to create high switching costs for customers and strategic partners; and novelty of the product/service as unique and recognized to be pioneering, thus creating previously unrecognized value.

Both approaches place emphasis on creating value for customers, as a starting point, in developing new business models. This is the basis they use from which viable and successful business models can be created. Accomplishing this will enable new customer value propositions, and this in turn intensifies the firm's ability to reinvent itself and its value chain, and thereby to change the rules of the game in its industry.

It is important to note, however, that it is essential to establish a suitable organizational environment, including appropriate managerial approaches and thinking, to enable new business models to arise. Firstly, organizations should be able to make coherent creativity and innovation an outcome of a company-wide capability that combines a diverse and purposeful set of ideas and viewpoints from people throughout the organization, as well as among stakeholders (e.g. customers, suppliers, distributors) linked to the organization.[69] And secondly, they should also be able to create an environment in which the organization can coherently self-organize and remain competitive by establishing a shared vision/identity and values, creating acceptable degrees of 'disorder' that stimulate creativity, encourage self-learning and promote risk-taking.[70]

Systemic strategy thinking as a prerequisite in networked value creation

The frameworks for development of new business models suggested in the literature - including that of Govindarajan and Gupta, and Amit and Zott reviewed above - consider business models from an individual organization perspective. However, there is a shift to a new strategic management paradigm that views strategic management in broader systemic context, termed 'systemic strategy management' – i.e. the co-shaping of organizational value propositions through systemic organizational capabilities.[71]

Successful businesses are those that co-evolve rapidly and effectively by bringing together resources, partners, suppliers, customers, and other agents to create cooperative networks. This implies that in a "business ecosystem", companies work cooperatively and competitively to generate new products/services, satisfy customer needs, and incorporate future innovations.[72] From an ecosystem perspective, therefore, the strategy focus of an individual firm is to co-shape and co-perform with the other players in the business community and to build co-opted capabilities in the ecosystem.

The critical dimension of an ecosystem is that it is not restricted to an organization's traditional industry, customer base and supply chain, but typically could also span a variety of industries, stakeholders, organizations, and markets and customers. Systemic strategy thinking, then, is the basis of business ecosystems mindset with an understanding of particular phenomena and value-creation possibilities within the context of a larger whole.[73] Figure 2 provides a systemic framework for understanding this co-shaping of the development of new business models.

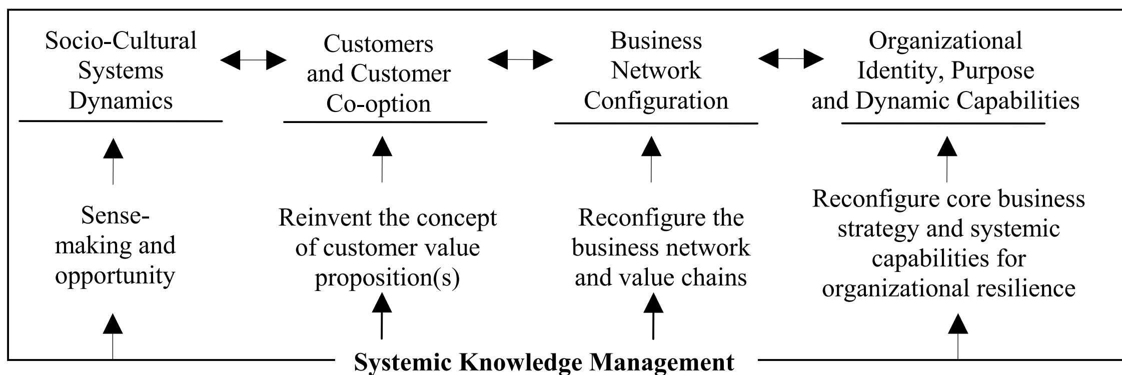

Figure 2: A systemic perspective of developing new business models

The figure indicates that a new business model arises not only from reconfiguring an organization's core business strategy and dynamic capabilities, but also from making sense of socio-cultural dynamics and opportunity gaps, reinventing of customer value proposition(s), and reconfiguring the business network and its value chains.

Due to increased networking, deconstruction, prosumption, and other disruptive changes that are taking place in the business environment, it has been possible to co-shape customer value creation that result in new business models and industries. For example, the web of relationships that networks span sets in motion the flow of knowledge and innovations among co-evolving organizations and individuals (customers, suppliers, producers, competitors, and other stakeholders). These networks transcend the traditional organizational value chains and boundaries, and bring about the creation and sharing of knowledge, innovation, capabilities and skills through both competition and collaboration. This improves and sharpens managerial sense-making of socio-cultural business system dynamics, for managers to guide, cultivate and shape self-organizing creative activities in the organization for the creation and building of new business models .

For example, consider the systemic creation of new customer value: In today's knowledge economy, customers are more informed, knowledgeable, competent and directly reachable. Customers can now become active participants with companies in the "co-creation" of customer value propositions, customer expectations and market acceptance for products and services.

A systemic strategic knowledge management, then, provides the basis for continuous radical innovation and adaptation to the changing environment through co-shaped customer value propositions. This applies similarly to all stakeholders in value chains, e.g. suppliers and distributors, not only inside traditional value chains but in the strategic business ecosystem. Therefore, its generation and utilization should be strategically managed, in a systemic way, to enhance the dynamic capabilities of the individual company.

The wheel of business model reinvention: how to operationalize and measure the development of new business models

Traditionally, the success or effectiveness of a business strategy could be evaluated in terms of well it: fits the general external environment (political/legal, sociocultural, technological, economic, demographic, and global aspects of the outside world); fits the industry in question (Porter's five forces); consider environmental trends, identify success factors and deal with the ramifications; and takes advantage of the firm's current core competencies, or call for acquiring core competencies, necessary for the strategy to succeed.[74]

This "fitting" concept of an organization was mostly used for existing business models and applied in an analytical context, and should not be confused with the concept of organizational fitness, i.e. dynamic capabilities for systemic adaptive and reinventive activities. The challenge that arises is how to operationalize the dimensions of new model creation, as depicted in Figure 2, and how to evaluate proposed new business models within the uncertainty, unpredictability, and rapid change in the business environment.

Figure 3 depicts the four-dimensional tool of business reinvention by making sense of environmental changes and the relevance of a possible new business model.

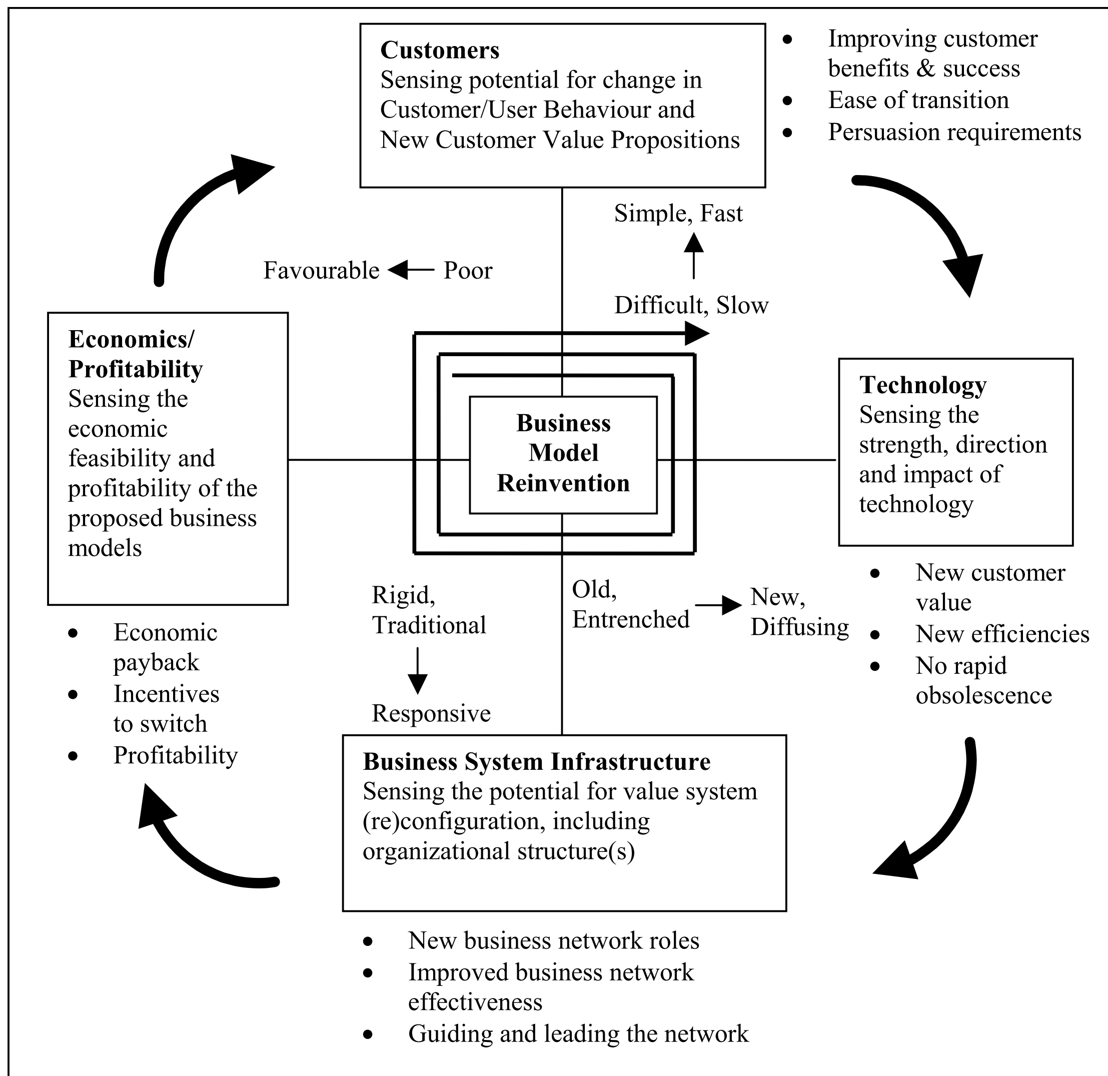

Figure 3: Wheel of business model reinvention

The wheel of business model reinvention consists of four dimensions:[75]

- *Customer sensing* (including new customer value propositions): refers to the relative ease of acceptance of a new value proposition.

- *Technology sensing*: indicates the relative strength, direction and impact of technology on new customer value and the business network.

- *Business infrastructure sensing* (organizational and business network infrastructure): refers to the relative responsiveness of the traditional business network to reconfiguration, or relative ease of a new business network configuration.

- *Economics/profitability sensing*: indicates the relative economic feasibility and profitability of the proposed model.

The closer the results are to the outer limits of the figure, the more likely it is for business model reinvention. Whenever, for instance, new technologies emerge, new businesses are likely to be created, and competitive advantages could accrue to effective first (prime) movers and/or early movers and close followers. The framework takes into account the dynamic nature of business models and, moreover, considers critical dimensions, such as customer value creation, economic feasibility and the impact of technology and business infrastructure.

The wheel illustrates the interactive (systemic) flow from all four dimensions in business model reinvention. Organizations seek ways of creating customer value propositions with products/services that are innovative and that satisfy generic underlying needs. Suitable technology should be in place that can easily leverage efficiency and the new customer value. The business system infrastructure, in turn, should be configured in such a way that would enhance the customer value that has been created and being offered. Finally, all the endeavours that have hitherto been undertaken should be economically feasible to benefit all those involved in the reinvention process, as well as in newly configured value chains. Organizations should continuously attempt to reinvent themselves, hence, the wheel starts all over again with sensing customer needs and the potential for creating new customer value propositions and resumes with the rest of the framework's dimensions.

Application of the wheel

There are numerous examples of organizations that have both reinvented themselves and their industry. Companies such as IKEA[76] and Wal-Mart[77] have succeeded in "changing the rules of the game" and becoming drivers of their industries by discarding conventional beliefs and established ways of doing business. For the purpose of this study the companies BRL Hardy and Dell are used as demonstrating examples.

BRL Hardy's New Business Model in the Global Wine Industry

Among many companies in the global wine industry, one that took advantage of others' inflexibilities was BRL Hardy, an Australian wine company that defied many of the well-entrenched traditions of international wine production, trading, and distribution – despite the fact that its home country produces only 2% of the world's wine.

From a 1991 base of $31 million in export sales – much of it bulk for private labels and the rest a potpourri of bottled products sold through distributors – Hardy built its foreign sales to $178 million in 1998, almost all of it directly marketed as branded products. The insight that triggered this turnaround was the realization that for a lot of historical reasons, the wine business – unlike the soft-drinks or packaged-foods industries – had very few true multinational companies and therefore very few true global brands. This was a great opportunity waiting to be seized.

The inflexibility of the European practice could be attributed to labelling wines by region, subregion, and even village. A vineyard could be further categorized according to its historical quality classification. The resulting complexity not only confuses consumers but also fragments producers, whose small scale prevents them from building brand strength or distribution capability. This created an opportunity for major retailers to overcome consumers' confusion, and capture more value themselves, by buying in bulk and selling under the store's own label.

For decades, BRL Hardy's international business was caught in this trap. It distributed its Hardy label wines to retailers through local agents and sold bulk wine directly for private labels. But the company's insight, and its willingness to change the rules of the game on

both the demand and supply sides, gave it a way out. First, new staff was appointed and new resources allocated to upgrade overseas sales offices. Instead of simply supporting the sales activities of distributing agents, they took direct control of the full sales, distribution, and marketing. Their primary objective was to establish Hardy as a viable global brand. The company's supply-side decision was even more significant. In order to exploit the growing marketing expertise of these overseas units, Hardy encouraged them to supplement their Australian product line by sourcing wine from around the world. Not only did Hardy offset the vintage uncertainties and currency risks of sourcing from a single country, it also gained clout in its dealings with retailers. By breaking the tradition of selling only its own wine, Hardy was able to build the scale necessary for creating strong brands and negotiating with retail stores.

The advantages have been clear and powerful. The company's range of wines – from Australia as well as France, Italy, and Chile – responds to supermarkets' needs to deal with a few broad line suppliers. At the same time, the scale of operation has supported the brand development so vital to pulling products out of the commodity range. Results have been outstanding. In Europe, the volume of Hardy's brands has increased 12-fold in seven years, making it the leading Australian wine brand in the huge UK market, and number two overall to Gallo in the United Kingdom. And branded products from other countries have grown to represent about a quarter of its European volume. Hardy has evolved from an Australian wine exporter to a truly global wine company.

Source: Adapted from Bartlett and Ghoshal[78]

BRL Hardy's radical strategy of introducing a new competitive business model challenged the industry's established rules of competition by taking advantage of others' inflexibilities and deep-rooted traditions in international wine production, trading, and distribution. With systemic sense making, and application of the wheel of business model reinvention, Hardy discovered new customer value by providing novel solutions for consumers, new value for small scale wine producers, as well as for distributors and other partners. Its business system infrastructure was reconfigured to appoint new staff and allocate new resources. In addition, the value system was reconstructed to enable the company build a strong brand image with the necessary marketing and distribution

capabilities that supported it. Finally, Hardy's profitability from such an undertaking is obvious – it became one of the leading wine brands worldwide.

How Dell Redesigned The Traditional Industry Value Chain

The traditional value chain in the personal computer industry could be characterized as "build-to-stock". PC manufacturers designed and built their products with preconfigured options based on market forecasts. The products were first stored in company warehouses and later dispatched to resellers, retailers, and other intermediaries, who typically added a 20 to 30 percent markup before selling to their customers. Manufacturers controlled the upstream part of the value chain, leaving the downstream part for middlemen. Retailers justified their margins by providing several benefits to customers: easily accessed locations; selection across multiple brands; the opportunity to see and test products before purchasing; and knowledgeable salespeople who could educate customers regarding their choices.

Two trends in the 1980s allowed Dell to radically reengineer the value chain. First, corporate customers were becoming more sophisticated and experienced technology users and no longer required intense personal selling by salespeople. Second, the different components of a PC (monitor, keyboard, software, and so on) became standard modules, permitting mass customization in system configuration.

When Dell developed its "direct" model, it dramatically transformed the value chain architecture by departing from the industry's historical rules on several fronts:

- It outsourced all components, but performed assembly.
- It eliminated retailers and shipped directly from its factories to end customers.
- It took customized orders for hardware and software over the phone or via the Internet.
- It designed an integrated supply chain linking its suppliers closely to its assembly factories and the order-intake system.

Dell created a "virtuous" cycle by rewriting the rules of the PC industry, custom-configuring PCs through direct dealings with end users. Customer intimacy gave Dell superior forecasting ability, which allowed it to pursue JIT manufacturing with very low

levels of finished goods and components inventory and little risk of stock-outs. Radical reductions in inventory lowered costs and also enabled Dell to be first to market with the latest products. The net result was that Dell had the dominant share of the PC market, which in turn led to more customer contacts - thereby starting the cycle all over again.

The new value chain architecture also enabled Dell to globalize faster and more profitably than its competitors for two reasons. First, Dell's direct model yielded the same benefits in non-U.S. markets as it did at home. Second, because of its direct channel, Dell did not require access to local distribution channels and so faced lower entry barriers into foreign markets.

Competitors such as IBM and Compaq probably found it difficult to imitate and neutralize Dell's direct model for fear of alienating their dealers. The bulk of these companies' sales came through third-party dealers. If they set up direct channels, their distributors, retailers, and resellers would be upset at the loss of market share, and the companies could not run the risk of angering their critical constituency.

Source: Adapted from Govindarajan and Gupta[79]

Two major disruptions in the computer business led Dell to reconfigure its value chain dramatically: customers' increased knowledge and experience in technology, and the capacity for mass customization of PC system configurations. Accordingly, the company redesigned its value creating activities so that it became efficient and effective in targeting its customers and enhancing customer value. Dell's radical value chain enabled the company, together with its competitors' organizational ineptness to do the same, to become a worldwide leading PC firm. Dell had to apply superior sensing skills, and abilities to develop new customer value and effective value chain configurations.

Conclusion

Recent changes in the business landscape have brought about the deconstruction of traditional boundaries and relationships (organizational, industrial, national and global); creation of new industries and new business models; and has made knowledge, innovation and self-renewal sources of sustainable competitive advantage. And yet, many

established companies find it hard to escape organizational inertia caused by existing industry orthodoxy and mindsets.

The driving forces behind the changes and unpredictability of the business landscape challenge the traditional approaches to strategic management. In the present-day turbulent environment, new problems cannot be tackled by "old remedies" such as continuous improvement. On the contrary, they require new, radically different solutions that test and challenge the fundamental make-up of conventional strategic management thinking and practices. The real challenge for most organizations, therefore, is not whether the rules of the game will change (because they will); rather, will they make the necessary radical transformation required of them to take the initiative.

The paradoxical situation of creating new business models while both benefiting and cannibalizing existing models may seem like destroying an organization that companies spend their resources on in perfecting. However, systemic strategic management does not mean a complete and/or instantaneous discarding of the existing organizational business model. It rather means to initiate, experiment with, and develop new business models alongside the management of traditional business models – a paradoxical and systemic mindset, with application of appropriate frameworks and tools.

Disrupting and even discarding traditional means of doing business seems risky for established companies. However, provided that organizations innovatively reinvent organizational and industry configurations that result in new customer value propositions, as well as sensible value for all value chain stakeholders, companies can achieve new bases of sustainable competitive advantage in today's fast changing business environment – until the next wave of business model reinvention. The latter indicates that the era of organizational 'comfort zone' is finally over – at the peak of success is the greatest danger for any organization. The implication is that the search for business model reinvention in today's world is a continuous process.

Managerial Implications:

This article provides executives and managers with a systemic perspective of developing new business models in addition to a powerful tool - the wheel of business model reinvention. With a systemic view of the environment (from a business ecosystem perspective), they can co-shape new customer value creation and develop new business models with other key players in the business community. The wheel of business model reinvention furthermore provides a valuable means of making sense of the environment and of proposed business models. These include critical dimensions of new customer value propositions, enabling technology, reconfiguration of the value system, and the economic feasibility of a new business model.

It is also crucial to recognize that executives and mangers should be able to create a suitable environment or thinking that enables new business models to arise. Constructing such an environment/thinking comprise of ways that facilitate and enhance company-wide but cohesive creativity, innovativeness and imaginativeness that result in novel and unique customer value proposition(s).

With such initiatives, executives and mangers can easily and readily discover ways for changing the basis of their organization's competitiveness, and for cultivating, sustaining and increasing their organization's fitness.

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