

1 | *The Imperative for Business Model Innovation*

Nothing is so practical as a good theory.

Kurt Lewin

Introduction

The concept of the business model has become especially prominent in recent times, even though it has been in use among business practitioners and academic scholars for a long time (Massa and Tucci, 2017; Teece, 2010). Alfred Chandler, the prominent Harvard business historian, outlined eloquently that American firms transformed themselves via vertical and horizontal integration from 1840 onwards following the emergence of the railroad for transportation, telegraph for communication and coal as a major source of energy (Chandler, 1977). Moreover, Joan Robinson, the distinguished Cambridge economist – in her famous article discussing the production function and the theory of capital – posited that each production technique might display different degrees of mechanisation involving its own specific *blueprints*, and there may be no recognisable items in common between one and any other (Robinson, 1953). Although Chandler and Robinson did not explicitly use the term “business model,” the spirit of their analysis describes the architecture of firms that contribute to performance differences.

The more recent prominence of business models was predominantly fuelled by the Internet and by digital technologies. [Amazon.com](https://www.amazon.com), Uber, Airbnb, Google, Netflix and Southwest Airlines are firms that are founded on business model innovations, that is, innovations¹

¹ Joseph Schumpeter had proposed that the process of technological change in a free market consists of three phases: *invention* whereby a new idea or process is conceived, *innovation* whereby arranging the economic and social processes for implementing an invention and *diffusion* whereby stakeholders adopt the new discovery or imitate it (Schumpeter, 1939, 1942).

that involve changes to a business's value proposition combined with changes to how the value is created and captured by the firm and the network of partners required to do so. Moreover, competitive pressures have pushed business model innovation high up the priority list of firms worldwide (Global Innovation Barometer, 2013; Hao et al., 2020; IBM Global CEO Study, 2006). Perhaps unsurprisingly, not a day seems to go by without some new prescription in the popular press advising managers on how to deal with the challenges and opportunities posed by such innovation. Business model innovation can create huge opportunities, while threatening traditional means of generating revenue (Zott and Amit, 2008). As a consequence, business model innovations can create the fortunes of some firms, while killing the market positions of others (Velu, 2015). Incumbent firms, who may not have implemented such innovations, are forced to wrestle with decisions that can profoundly affect their future. New firms need to grapple with decisions about how best to design new business models that disrupt existing industries or create new markets for their propositions.

One indicator of the importance of business models is the surge in prominence of the number of articles in the *Financial Times* using the term "business model": this number grew from 10 in 1995 to over 2,027 in 2021. A similar trend is evident in other major business newspapers around the world, including *The Wall Street Journal* in the United States and *The Economic Times* in India. Surveys of CEOs suggest that firms that emphasise business model innovation have grown their operating margins faster than their competitors (Hao et al., 2020). Moreover, a survey of senior executives in twenty-five countries found that business model innovation is at the top of all forms of innovation on their priority lists (Global Innovation Barometer, 2013).

Business model innovation is also a critical enabler of productivity improvements. Productivity growth has slowed down in the last decade in major economies, as well as in emerging markets, despite the prevalence of digital technologies (Bean, 2016). This phenomenon is widely known as the productivity paradox (Syverson, 2011).²

² Global labour productivity (output per worker) growth slowed down from 2.4 per cent to 2.1 per cent between 1996 and 2006 and between 2007 and 2014. Total factor productivity growth displayed an even larger slowdown from 1.3 per cent to 0.3 per cent during the same period (Van Ark, 2016).

Moreover, industries that are the most intensive users of information and communication technologies (ICT)³ appear to have contributed most to the slowdown in productivity (Van Ark, 2016). There could be many reasons for the productivity paradox, including the skills' mismatch due to changes in product market structures driven by digitalisation; the slowdown in technological diffusion between firms at the front of the technological frontier and others; and the legacy of the financial crisis causing dislocated markets and mismeasurement as a result of the digital economy providing significant propositions for free. However, studies on the history of new technologies have shown that productivity improvements might be hampered by the limited redesign of business models following the adoption of new technologies by firms. For example, in the United States, productivity gains were very limited when electric motors first replaced the steam engine on an industrial scale in the late nineteenth century. It was only when firms completely changed their business processes and corresponding business models that technology had a significant impact – and that took over forty years (David, 1990).

A business model can be seen as a complex organisational system that aims to transform input into valuable propositions for customers. Business models often act as the bridge between technology and the ability to deliver a compelling customer value proposition. Hence, the ability to experiment with new technologies, and to develop associated business models, is potentially a major source of productivity gains and growth for both new and established firms (OECD, 2015). Although new technologies often act as the catalyst for business model innovation, they are not necessary for the emergence of new business models. For example, the emergence of the *Metro* as one of the leading newspapers in the world was not due to any particular new technology; its free-sheet business model is based on distributing the paper free of charge to commuters in busy cities. The *Metro* earns its revenue from advertisements, which represents a major difference when compared to conventional newspapers that earn revenue from subscriptions or sales at news-stands.

Business model innovations can be disruptive when they change the bases of competition by altering the performance metrics along which firms compete (Markides and Oyon, 2010). Such disruptive

³ Measured by purchases of ICT assets and services relative to GDP.

business models can manifest themselves through acquiring the customers and beneficiaries of the dominant business model by improving their efficiency in the provision of the existing customer value proposition or by creating a new market for an improved value proposition. The implications of disruptive business models are evident across many industries, including low-cost airlines, for example, Southwest Airlines; the retail book industry, for example, Amazon; and Google, with its search engine and related services; and, more recently, the taxi and hotel industries, with the emergence of firms such as Uber and Airbnb, respectively. However, how these business models emerge and disrupt industries, and the leadership and organisational design challenges inherent in managing them, are among the issues that scholars and managers are trying to understand better. This book aims to address some of these issues by bringing together the research on business model innovation and identifying areas for future research while highlighting the implications for management.

1.1 Strategy, Business Models and Tactics

Scholars have provided various definitions of a business model. These definitions vary from the stories that explain how enterprises work (Magretta, 2002), the resources and processes that are put together to create and capture value (Johnson et al., 2008) or the structural template of how the focal firm connects to factor and product markets (Zott and Amit, 2008). The common theme in these definitions rests on how the revenue model and the underlying cost structure, as a result of the operations, create and deliver the customer value proposition.

Business models are a form of activity system that connects the internal aspects of the firm, such as resources and routines, with the external aspect, such as partners, markets and customers, and hence articulates how the firm goes to market to implement the strategy (Baden-Fuller and Haefliger, 2013; Zott and Amit, 2010; Zott et al., 2011). The business model as an activity system has three key design parameters, namely, *content*, *structure* and *governance*. Content outlines which activities are part of the business model. Structure is about how these activities are linked to one another. Finally, governance relates to who can make decisions about them. The business model acts as a mechanism for actors to collectively form a shared

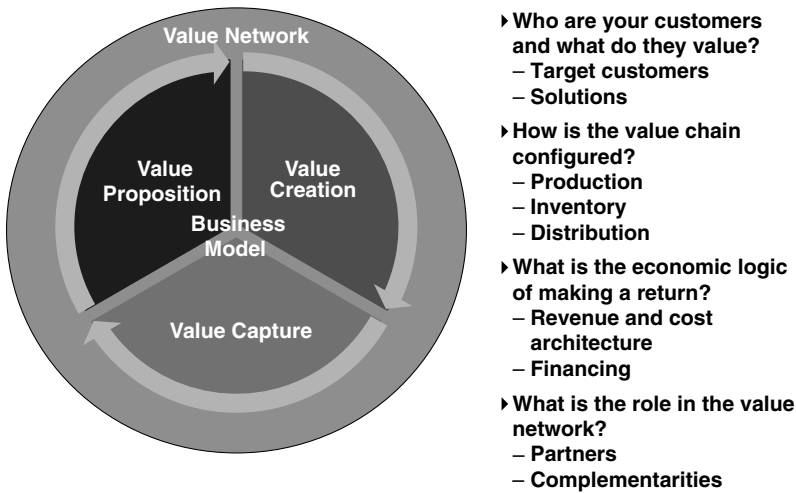


Figure 1.1 Components of the business model

Source: Velu (2018)

understanding based on rules, norms and beliefs in order to guide their choices (Chesbrough and Rosenbloom, 2002; Doganova and Eyquem-Renault, 2009). In this sense, business models are the “architecture” that provides the bridge between the value created for customers and the value captured by the business in terms of profit.⁴ A business model can be viewed as a complex system with components that connect the customer value proposition, how value is created, the means of value capture and the partners in the value network (Velu, 2017). Management’s objective is to manage the *dynamic consistency* by maintaining congruence between the components of the business model in order to ensure efficiency, while enabling innovation of the business model (Velu, 2020).

We propose the 4Vs of the business model: value proposition, value creation, value capture and value network (Velu, 2018). Business models define the organisation’s customer value proposition, and its approach to value creation, and the means of value capture and the partners in the value network. This is illustrated in Figure 1.1. Business model innovation involves the discovery and adoption of fundamentally different modes of value proposition, value capture and/or value

⁴ This includes a holistic perspective covering value for all stakeholders.

creation and the value network from an existing business – so business model innovation redefines what an existing product or service is, and how it is provided to the customer, by seeking to identify unique configurations of business model attributes (Velu and Jacob, 2016).

Business models can be defined both objectively and subjectively (Doz and Kosonen, 2010). The objective definition encapsulates the economic manifestation in terms of the structure of the firm's relationships and procedures (Teece, 2010). The economic manifestation captures the financial viability of the business proposition in relation to value creation and value capture. In this sense, the objective perspective corresponds to the components and the relationship between components in order to have an economic outcome. The subjective definition encapsulates the cognitive manifestation that shapes managerial choices (Baden-Fuller and Mangematin, 2013). The cognitive manifestation captures how senior management conceptualise the business model as a model-like device as the basis for their actions in order to create and capture value.

A firm's business model is different to its business strategy, although the two constructs have some overlapping characteristics (Zott and Amit, 2008). In particular, a business model relates to the overall system that drives revenue and costs to deliver the customer value proposition, while business strategy refers to the generic choices that firms make to compete effectively in the marketplace (e.g., creating competitive advantage via differentiation, cost leadership and focus (McGahan and Porter, 1997)). The business model represents how the activities of the firm work together to execute its strategy⁵ (Casadesus-Masanell and Ricart, 2010); hence, choosing a particular business model means choosing a particular way to compete.

Strategy relates to the contingency plan regarding which business model to adopt. Hence, strategy can be seen as an action plan that responds to a high-stakes challenge and requires diagnosis, guiding policies and coherent action (Rumelt, 2011). On the other hand, the business model is the underlying business logic of the go-to-market strategy. Tactics relate to how to optimise the performance of the

⁵ Strategy formulation and implementation are an integral part of business model design and evolution (Foss et al., 2015). Strategy is determined by answering three questions: *What* is the offer, *who* constitutes the target market and *how* is the offer delivered to the customer? Business model selection constitutes the realised strategy that principally resides within the "how" question.

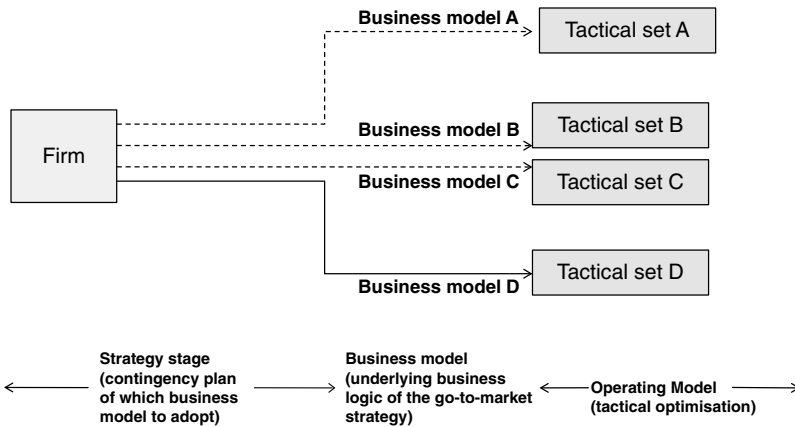


Figure 1.2 Strategy, business models and tactics

Source: Adapted from Casadesus-Masanell and Ricart (2010)

business model once a strategy is chosen – the operating model. Figure 1.2 illustrates the relationship between strategy, business models and tactics. The constructs of business models and strategy are related because the understanding of how a business model works is important when formulating an effective business strategy. For example, a firm could execute a cost leadership strategy by more effectively training its staff to use state-of-the-art technology. Such a cost leadership strategy might be implemented based on the existing business model. On the other hand, a firm that intends to develop a differentiation strategy, such as going into low-cost air travel, might require a reinvention of the business model. For example, in the early 1990s, the Ryan brothers changed their full-service regular airline business into a low-cost, no-frills airline to save the firm from bankruptcy. Such a strategic change to create differentiation requires innovation to the business model. The business model innovation that created Ryanair was not only instrumental in saving the firm from bankruptcy but also contributed to the re-emergence of the firm as a profitable airline (Casadesus-Masanell and Ricart, 2010).

1.2 Business Model Innovation and Performance

The design of new business models has been shown to affect performance (Zott and Amit, 2008). The design of the business model

encompasses how the activities are configured, their relationship with one another and the actions taken by management to maintain the congruence of the link between the customer value proposition of the external market environment and how value is monetised. For example, some business model configurations in Formula 1 racing have a superior performance to others (Aversa et al., 2015), and certain service-based business models among manufacturing firms have been shown to improve performance (Visnjic et al., 2014).

Such a positive relationship between business model innovation is evident not only in larger firms but also in small- and medium-sized firms (Cucculelli and Bettinelli, 2015). However, research shows that there are contingency factors affecting the relationship between business model innovation and performance. Zott and Amit (2008) studied the relationship between strategic positioning and business model design in relation to performance by examining relatively new firms that conducted parts of their business over the Internet. They classified these businesses based on the degree of novelty (novelty-centred business model) – new ways of conducting economic exchanges – and degree of efficiency (efficiency-centred business model) – reducing transaction costs for all transaction participants. They showed that, as firms pursued a differentiation strategy, there was a positive relationship between the degree of novelty-centred and efficiency-centred business model design in relation to firm performance in terms of market value. However, high design novelty has a stronger positive relationship than efficiency-centred business model design. This is because firms that pursue a differentiation strategy need to make their customer value proposition different to that of their competitors, which might entail new ways of doing business through radically different business models rather than merely reducing the transaction costs for the customer. On the other hand, when firms try to design business models with both high design efficiency and novelty in their business model, the performance tends to decline as a result of experiencing diseconomies of scale. This is in line with the positioning school of strategy that argues that firms seeking to be cost leaders, and also to differentiate, can ultimately become stuck in the middle and hence fail to create superior competitive advantage.

Building on this early work on business model design and performance, Velu (2015) addressed the question of how the degree

of business model innovation affects the survival of new firms. The research analysed new firms that launched electronic trading platforms in the US bond market between 1995 and 2004 following the advent of internet technology. The study showed that new firms with a high or low degree of business model innovation are more likely to survive for longer than new firms with a moderate degree of business model innovation. The study also showed that partnering with third-party firms with complementary assets reduces the survival of new firms as the degree of business model innovation increases. This might be because such complementary assets derived from partnering might be most effective when the business model is not altered radically, as it creates significant complexity and coordination costs. Research has also shown that the relationship between business model innovation and performance might be related to the types of skill set held by the managers (Patzelt et al., 2008). For example, in the biotechnology industry, founder-based firm-specific experience contributes more positively to performance in the case of platform firms focusing on the commercialisation of research services or enabling technologies compared to biotherapeutic firms that continuously need to come up with new drugs. This is because such platform-based firms are not radically altering the core proposition over time. However, founder-based firm-specific experience has a negative impact on performance in therapeutics firms that focus on biotherapeutic products (drugs) because new drug development requires new knowledge and skill sets.

1.3 Challenges to Business Model Innovation

Incumbent firms often find it extremely challenging to innovate their business models effectively despite ample evidence of the positive effects on performance of such innovations. Business model innovation can occur when there are changes in the components, or interdependencies between the components, in order to serve an existing, or new, market (Amit and Zott, 2012; Casadesus-Masanell and Zhu, 2013). Such business model innovation might require, among other things, *reactivating* – changing the set of activities; *relinking* – changing the linkage between activities; *repartitioning* – changing the boundaries of the focal firm; or *relocating* – changing the location in which activities are performed (Santos et al., 2015). Such decisions need to be made

in order to maintain congruence between the different components of the business model to ensure that the positive reinforcing factors are harnessed, while managing the conflicts arising from the negative mitigating factors. There are two principal reasons for the difficulty that incumbent firms face in innovating their business models. First, senior management tends to get locked into a cognitive frame with a dominant business model design that it is unable to reframe appropriately in a timely manner – the *cognitive challenge*. Second, incumbent firms tend to find it difficult to reconfigure their activities and processes from an architectural perspective to change the business model – the *reconfiguration challenge*. We review these challenges next.

1.3.1 *The Cognitive Challenge*

The importance of the cognitive framework and the influence of the dominant design of the business model have significant implications for the ability of incumbent firms to innovate their business models. For example, Xerox was one of the major firms in terms of the number of patents held in the 1960s and 1970s. In fact, Xerox PARC (Xerox's Palo Alto Research Centre) was responsible for many science-based technological inventions, such as the mouse, word-processing software, the personal computer and the graphical user interface. However, Xerox did not commercialise these inventions (Chesbrough and Rosenbloom, 2002); the firm's success in the past was partly responsible for such a missed opportunity. In order to understand why this is the case, it is instructive to review the history of Xerox.

Xerox was originally known as the Haloid Company, which developed the first dry copier technology. Xerox launched the 914 dry copier in 1959 when the prevalent technology was wet copiers.⁶ The 914 copier would have retailed at over \$2,000, which was close to seven times the price of a regular wet photocopier, at \$300. Since wet copiers were cumbersome to use, as one needed to wait for the ink to dry upon photocopying, clients only photocopied very important documents. In order to make the 914 copier attractive to clients, Xerox decided to encourage leasing of the machines at \$95 per month, with the first 2,000 copies free, although at the time most clients did not

⁶ This was called the 914 copier because the photocopier used paper that was 9 by 14 inches.

photocopy more than 2,000 copies per month so they felt that the 914 copier was good value for money. However, once they started using the 914 copier, they soon began copying more than 2,000 copies per month and paying Xerox four cents per copy above the 2,000 copies. The success of the leasing model prompted Xerox to vertically integrate into the paper business in order to make additional profits from supplying the paper to clients for photocopying. The 914 copier soon became a bestseller and accounted for two-thirds of Xerox's revenue.

The success of the photocopying business for Xerox prompted its senior management team to develop a vision for transforming how the office would work in the future, with Xerox machines central to that vision. This vision was also driven by the fear of Xerox becoming redundant following the emergence of the paperless office enabled by digital technologies such as the digital computer. Hence, Xerox set up Xerox PARC and hired some of the most brilliant scientists to work on the latest technologies, which resulted in some of the major inventions listed above. However, the new propositions from Xerox PARC did not fare well in the annual budgeting process because they did not conform to Xerox's business model. In particular, when the inventions (such as the Star workstation and the Ethernet) from Xerox PARC were presented to the senior management at Xerox, the latter asked a simple question: "How would these technologies help speed up photocopying?" This was because the volume and speed of copying were central to the success of the 914 copier, and hence to Xerox's growth. Since the scientists did not have a clear answer to the question, the inventions were not funded for further development and therefore not commercialised by Xerox. In fact, several of the key technologies and patents were sold to the founders, Steve Jobs and Bill Gates, to form Apple and Microsoft, respectively.

Another example of the cognitive framing and dominant design affecting the decisions of firms is the failure of the Polaroid Corporation to commercialise digital cameras (Tripsas, 2010). Polaroid introduced the first instant camera in 1948. The leading firm was Kodak, which had transformed the camera industry by introducing the Brownie chemical-based film camera in 1901, and the technology was still dominant in the market. However, Kodak cameras were still cumbersome to use, as the films needed to be processed separately in a lab. In 1965, Polaroid introduced the "Swinger" instant camera model. In order to encourage sales, it dropped the price of the camera to stimulate demand for

the film and hence increased the price of the films. This was the “razor and blade” business model, with the razor (the camera, in the case of Polaroid) sold at a loss in order to stimulate demand for the blades (the films, in the case of Polaroid), which are sold at a premium. In 1972, Polaroid invented the SX-70, with the lab for development essentially embedded in the camera: the SX-70 provided one-step developing following the photo being taken, with no waste. The success of the Polaroid Corporation was a source of great envy for other firms. Between 1948 and 1978, Polaroid showed annual growth rates of 23 per cent in sales, 17 per cent in profit and 17 per cent in share price.

The success of Polaroid enabled it to invest heavily in research and development. The spirit of the high-risk radical invention in the firm was captured in a quote from the 1980 annual report to shareholders: “Do not undertake the program unless the goal is manifestly important and its achievement nearly impossible.” Such a focused effort in R&D at Polaroid enabled the firm to file some of the early patents in digital camera technology. However, it was slow to realise the potential of commercialising digital photography because of the dominant design of the razor and blade business model of Polaroid, which influenced the cognitive framing of the senior management team in the evaluation of new technologies. This is evident in a quote from the CEO of Polaroid at that time: “...in the photographic business all the money is in the software, none of it’s in the hardware ... so the fundamental objective in these things was to find ways to advance products but that would be useful for improving the software sales.” Since digital photography essentially eliminates the distinction between the camera (razor) and the film (blade), the senior management team rejected commercialising digital photography despite having in-depth knowledge of the technology from its own patents. Xerox and Polaroid were leaders of not only the existing technology but also the new technologies in their respective fields. However, they struggled to leverage these new technologies in order to commercialise them. The challenge for Xerox and Polaroid was not technological know-how but overcoming the cognitive framing of their respective business models that made them world leaders. In order to enable business model innovation, there needs to be a means of systematically changing the cognitive framing of the business model by managers. How this can be done will be the subject of later chapters. Next, we look at how firms are able to overcome the reconfiguration challenge.

1.3.2 The Reconfiguration Challenge

In this section we discuss why managers, even when they are able to overcome the dominant logic of their previous business model as a result of cognitive framing, might still respond in a sub-optimal way. We call this the reconfiguration challenge. There are three broad reasons why firms might respond sub-optimally when trying to innovate their business model, namely, tactical responses, organisational design issues and leadership challenges. Let us examine these in turn.

The first reason is the result of firms using tactical responses that might destroy the economics of the business model. This is because firms change the value proposition of an existing business model via a tactical response through their operating model without altering the underlying business model. An example of this can be seen in the rental car industry (Hart et al., 2005). Zipcar is a car rental business that was launched in Boston, the United States, in June 2000. Zipcar's business model was different to the major incumbent car rental firms in the United States at that time, such as Hertz, Avis and Enterprise. Specifically, Zipcar enabled car rental by the hour, whereas the major incumbents only allowed rental by the day. Zipcar stationed its cars around cities and near residential neighbourhoods in pre-paid public parking spots where customers could pick up their cars and return them. The pick-up and drop-off processes were made very simple for the customer. Specifically, the car keys were left in the cars and members of Zipcar could unlock a car that they had booked by waving their Zipcar membership card – a unique proximity card called Zipcard – on the front windscreen during pick-up or drop-off.⁷ The cars were booked via the Zipcar website when one became a member and paid the annual subscription of \$75; the cars were charged by the hour directly to customers' credit or debit cards. The Zipcar model was cheaper than renting from the incumbent car rental firms, as the former included gas and insurance. Moreover, the incumbent car rental firms allowed rental by the full day but not by the hour.

The initial reaction of the incumbent car rental firms such as Hertz was to downplay the potential impact of Zipcar on their business. Indeed, Hertz did not initially respond to the launch of Zipcar but

⁷ Zipcar extended this to a mobile phone application, whereby customers can unlock their cars using their mobile phone.

began to see a slowdown in its revenue growth from 12.5 per cent in 2004 to 7.9 per cent in 2007. Moreover, when Hertz observed the successful expansion of Zipcar across various cities in the United States, it decided to respond with a business model that leveraged its fleet of cars and brand reputation. Hertz allowed rental by the hour in the Manhattan area of New York City in 2007: customers would pick up and drop off the cars in one of the Hertz depots. It soon became apparent to Hertz that this was destroying the economics of its business model, for two reasons. First, the systems and processes of Hertz were not designed to manage the new customer value proposition of renting cars by the hour. Hence, management of the inventory of cars required a separate process, which increased the costs involved. Second, the randomness of customer's renting by the hour added complexity to managing the car fleet for regular customers who rented by the day. Therefore, the service levels decreased as a result of the firm not being able to match the customer booking preferences exactly. Hertz therefore decided to abandon its business model experiment of adding a new customer value proposition of car rental by the hour and focus on the existing business model that was designed to deliver car rental by the day. Eventually, in 2008, Hertz launched Connect as a separate business that enabled rental by the hour with a separate car fleet to the conventional Hertz business model.

The second reason for a sub-optimal response is the organisational design and its implications for how the business model is launched. This might be because the firm launches a new business model to deliver the new value proposition and tactically integrates it with the existing business model. Such an approach could create conflict among the components of the business model. An example of this is the development of a new business model that retrofits the existing business model, as seen in the response of Blockbuster to the emergence of Netflix (Shih et al., 2007). Figure 1.3 shows the stark contrast of the share price performance of Netflix and Blockbuster, respectively, between 2002 and 2010.⁸ Netflix was created in 1997 and quickly evolved a business model of renting DVDs based on membership subscription. Netflix, an online business, also pioneered the delivery of DVDs by post rather than through retail stores. Blockbuster, which had more than 5,000 video rental stores across

⁸ Netflix was listed in 2002.

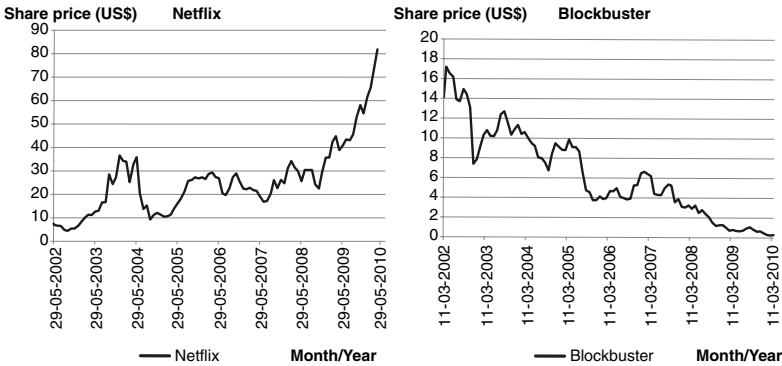


Figure 1.3 Share price of Netflix and Blockbuster
Source: Yahoo Finance

the United States, initially did not respond to the threat posed by Netflix. However, when it did respond in 2004, Blockbuster launched an online proposition, Blockbuster.com, to replicate the business model of Netflix, which was run in tandem with the Blockbuster store model. Blockbuster felt that its customer value proposition was better than that of Netflix because the customer could rent movies either online or through the store network seamlessly. This is encapsulated by a quote from the CEO of Blockbuster in 2008, Jim Keyes: “I’ve been frankly confused by this fascination that everybody has with Netflix ... Netflix doesn’t really have or do anything that we can’t or don’t already do ourselves.”

Two aspects of the response are worth noting, the first being the elimination of late return fees by Blockbuster. Blockbuster had a policy of charging fees for late returns; the late fees generated approximately \$600 million per annum, which was roughly 10 per cent of the company’s revenue. In addition to the revenue, late fees enabled Blockbuster to manage its inventory, as customers had an incentive to return the rentals in a timely manner. Since Netflix and Blockbuster.com were subscription models with no late fees, Blockbuster decided to drop its late fees for stores in 2005. Second, in order to provide an even better value proposition for its customers compared to Netflix, it allowed customers to return DVDs received by post via Blockbuster.com to Blockbuster stores. This added complexity to its inventory management system and increased costs further. Both the loss in revenue from dropping late fees and the added costs of complexity from

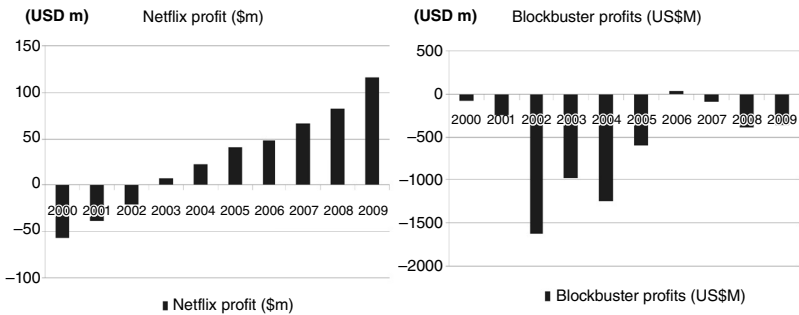


Figure 1.4 Profitability of Netflix and Blockbuster
Source: Financial statements of Netflix and Blockbuster

inventory management resulted in a poor performance at Blockbuster. The cost/income ratio of Blockbuster in 2003 prior to the year it launched Blockbuster.com was 0.72, and this had grown to 1.11 by 2009. In contrast, Netflix's cost/income ratio in 2003 was 0.80, and this came down to 0.74 by 2009. Figure 1.4 shows the profitability performance of Blockbuster and Netflix, respectively, between 2000 and 2009.⁹ These factors, together with the high cost of its branch network, resulted in Blockbuster filing for Chapter 11 bankruptcy in September 2010. It is clear that the response of Blockbuster in launching a new business model, and trying to integrate new customer propositions into the existing business model, created a mismatch between the components of its business model.

The third reason for a sub-optimal response is a lack of leadership in transforming the business model. An example of this is the case of Nokia (Doz and Keeley, 2017), the leading firm in the mobile phone industry in the early 2000s. However, the firm could not transform its business model fast enough to be a leader in the smartphone industry. In 2003, Nokia had two business divisions, Nokia Mobile Phones (NMP) and Nokia Networks (NET). NMP focused on selling handsets to distributors and operators, while NET focused on selling bundled handset deals to operators. Nokia decided, in September 2003, to adopt the matrix organisational structure to enable strategic differentiation between mobile phones, multimedia and enterprise solutions.

⁹ The last annual report available for Blockbuster was for 2009.

Such a structure would also enable the sharing of common marketing, sales, logistics and technology platforms for these businesses. However, the benefits of the matrix organisational structure did not materialise because of the lack of a clear “strategic vision” by the senior management team. This resulted in middle managers negotiating resource allocation via committees, which slowed down decision-making, with a lack of overall responsibilities for a technology roadmapping strategy. Moreover, during this period, mobile phone evolution from voice and text to smartphones meant a shift from focusing on market segmentation to mass customisation driven by software applications rather than the hardware of the phone. However, Nokia was slow to make the shift from traditional mobile phones to smartphones because of the lack of leadership, coupled with short-term quarterly sales targets, and a cap of 10 per cent on R&D over sales meant that the focus was on improving the existing mobile phones.

The above examples illustrate the importance of business model innovation in sustaining superior performance. The effectiveness of the business model in contributing to performance is based on the alignment and congruence between the value proposition, value creation, value capture and value network. As discussed earlier, there are several components to the business model: the value proposition, value creation, value capture and value network. Therefore, “fit” here refers to the internal consistency of the various components of the business model. Drazin’s and Van de Ven’s (1985) systems approach to fit is relevant here, whereby fit is defined as the degree of internal consistency of multiple contingencies and structural and performance characteristics. The cases provide vivid illustrations of how the lack of congruence could arise from activity and organisational design elements and, if not managed appropriately, could have detrimental consequences. Therefore, developing a business model where there is fit among the components of the business model, and continuing to maintain such congruence as tactical elements are changed, are among the biggest challenges that firms face.¹⁰ This calls for measuring and managing such congruence of the business model components via a Business Model Coherence Scorecard (Velu, 2020).

¹⁰ Drazin and Van de Ven (1985) assume that there are various ideal types that might give a superior performance. In that sense, there is equiprobability among the various combinations of options to configure the tactical choices.

1.4 Discussion and Outline of This Book

The cases show that the relationship between customer value propositions and business model design is crucial in order to create and sustain competitive advantage. In particular, understanding the relationship between strategy, business models and tactics is key. This is captured well by a quote from Ronald de Jong, former CEO of Philips CL, Germany, who said: “When the business model is innovative, operations and the product will follow automatically.” However, because of the functional nature of organisational design many firms tend to respond tactically to changes in the market environment by assuming that the business model is a given. Often, the product, price, promotion and distribution channels are leveraged individually and not collectively as the basis for a tactical response to changes in the strategic environment. Hence, this piecemeal response raises the question of who should be responsible for the business model. Often, in large organisations, as a result of the functional specialisation in order to drive efficiency, ownership of the business model is either dissipated or neglected altogether. Hence, firms often struggle when there are changes in the environment that call for innovation to the business model in order to serve a new market, or to serve an existing market with a different value proposition.

Management needs to overcome the cognitive and reconfiguration challenges in order to innovate the business model effectively. The challenge arises as there are always market and technological uncertainties affecting firms. Firms need some simple rules or metaphors, as managers are rationally bounded and can therefore only process so much information. Hence, management faces the cognitive challenge of refreshing the dominant logic of the business from time to time as the market environment or technology changes (Martins et al., 2015). Moreover, as management attempts to innovate the business model through reactivating, relinking, repartitioning or relocating, it is important to maintain dynamic consistency or fit between the components of the business model. This often calls for a deep understanding of the architecture of business models; therefore, management often faces the reconfiguration challenge, which is to execute the required change in the business model. This entails reconfiguring processes and competencies within the organisation, as well as its relationship with the external network of stakeholders.

We propose a holistic, systems-based perspective to better understand and manage these challenges in order to enable business model innovation (Velu, 2017). Such a holistic perspective highlights the hierarchical nature of business models, whereby the combination of activities comprises subsystems, which, in turn, can be connected to other subsystems. However, the interconnections imply that a change in one component, for example, due to the adoption of a new technology, could result in knock-on changes throughout the system before it settles into a new stable pattern or business model (Goldstein, 1999). Such patterned interconnections often harbour core processes that are crucial to how the business model evolves (Siggelkow, 2011; Velu, 2017). Identifying these core processes as part of the strategic objectives, and designing suitable business models, are often challenging tasks for management (Chatterjee, 2005). Such a holistic-systems-based approach to business model innovation will be required to leverage the benefits of new digital technologies and address some of the grand challenges of society. The innovation economy requires upstream activities in research and invention through to downstream experiments to leverage the new economic spaces opened up by innovation – and this requires new business models (Janeway, 2018; Schumpeter, 1939, 1942; Massa and Tucci, 2017). The remainder of the book will examine the opportunities that business model innovation creates and how management needs to go about overcoming the challenges in order to benefit from them. The chapters of the book are as follows.

Chapter 2: Business Models and Creating Markets

How do we think creatively about creating markets with new business models? This chapter will examine the role that business models play in the development of new markets. The chapter will also address how senior management could refresh the cognitive framing of the dominant design in order to identify and enable business model innovation.

Chapter 3: Organisational Structure and Leadership

What are the key principles of designing organisational structures and leadership challenges for business model innovation? This chapter will examine the leadership challenges, as well as the organisational design issues, for business model innovation. In particular, it will discuss how senior management could lead the business model innovation process and the organisational design issues to consider driving change within the firm. The chapter will also consider the design

principles for management information systems to enable business model innovation. The chapter will introduce the Business Model Coherence Scorecard (BMCS) as a means to manage the congruence of the components of the business model in order to achieve efficiency and effectiveness.

Chapter 4: Digital Technologies and Transformation

What are the key digital technologies affecting business model innovation? This chapter will examine the new digital technologies, such as additive manufacturing, blockchains, the Internet of Things (IoT) and artificial intelligence, and their potential to reshape industries. The chapter will also highlight an early-stage emerging technology, quantum technology, as it promises major business model innovation opportunities, as well as challenges, to provide benefits to society that would not be possible with existing digital technologies. It will examine the conceptual underpinnings to better understand the kinds of new business models that might emerge.

Chapter 5: Digital Platforms and Ecosystems

Why are digital platforms becoming ubiquitous and what are the business model implications? This chapter will examine the benefits and challenges inherent in managing platform-based business models. It will introduce the concept of layered modular architecture (LMA) and how platform business models evolve over time. In addition, the chapter will discuss the strategic issues of managing platforms within a business-to-consumer (B2C), compared to a business-to-business (B2B), setting.

Chapter 6: Small- and Medium-Sized Enterprises and Start-Up Business Models

What are the business model challenges for small- and medium-sized enterprises (SMEs) and start-up firms trying to commercialise new technologies? This chapter will explore the challenges of SMEs, which are part of major supply chains, to innovate their business model and improve performance. In addition, it will explore the process that entrepreneurs go through when developing new business models as part of commercialising new technologies such as spin-outs from university labs. In particular, the chapter will examine the challenge that start-up firms face when designing new business models to help create markets and subsequently evolve the business model into a profitable proposition.

Chapter 7: Sustainability and Business Models

What are the benefits and challenges inherent in designing business models to address the major global sustainability challenges? This chapter will examine the challenges related to climate change and the sustainability agenda, as well as the benefits of maintaining biodiversity. In particular, it will look at the different challenges involved in value creation and value capture from a multiple-stakeholder perspective. It will examine how to internalise externalities and design business models that encompass economic, social and environmental goals.

Chapter 8: Business Models for Socio-economic Development

What are the principles of designing business models to address socio-economic challenges? This chapter will examine business model design to address issues related to healthcare, poverty, education and general well-being. In particular, it will address novel business model design, where market solutions and government intervention alone might not be sufficient to address the issues.

Chapter 9: Conduct Risk and Business Models

What are the principles of designing business models to ensure fair customer and market outcomes? This chapter will explore how the global financial crisis highlighted the need to design business models in financial institutions that are profitable, while ensuring fair customer outcomes and the integrity of markets. It will introduce the concept of conduct risk and its relevance for sectors more generally beyond financial services. The principles of designing business models to manage conduct risk, and the implications, will be discussed.

Chapter 10: Conclusion

This chapter will review the role of new technologies in fostering business model innovation to enable industrial revolutions by glancing into business history. It will also revisit some of the general principles of the design of economic systems and the role of government in influencing the design of business models. This chapter will provide some concluding thoughts, from a theoretical and practical perspective, for fruitful and impactful research opportunities on business model innovation in the future.

Chapter 1 has provided an overview of the importance of understanding business model innovation and its relationship with strategy

formulation and tactical choice, including its impact on performance. It also provided an overview of the cognitive and reconfiguration challenges. These aspects provided the basis for an overview of the following chapters.

References

- Amit, R. and Zott, C. (2012). Creating Value through Business Model Innovation. *MIT Sloan Management Review* 53(53310): 41–49.
- Aversa, P., Furnari, S., and Haefliger, S. (2015). Business Model Configurations and Performance: A Qualitative Comparative Analysis in Formula One Racing. *Industrial and Corporate Change* 24(3): 655–676.
- Baden-Fuller, C. and Haefliger, S. (2013). Business Models and Technological Innovation. *Long Range Planning* 46(6): 419–426.
- Baden-Fuller, C. and Mangematin, V. (2013). Strategic Organization: A Challenging Agenda. *Strategic Organization* 11(4): 418–427.
- Bean, S. C. (2016). Independent Review of UK Economic Statistics. Final Report (March). https://assets.publishing.service.gov.uk/media/5a7f603440f0b62305b86c45/2904936_Bean_Review_Web_Accessible.pdf
- Casadesus-Masanell, R. and Ricart, J. E. (2010). From Strategy to Business Models and onto Tactics. *Long Range Planning* 43(2–3): 195–215.
- Casadesus-Masanell, R. and Zhu, F. (2013). Business Model Innovation and Competitive Imitation: The Case of Sponsor-Based Business Models. *Strategic Management Journal* 34: 464–482.
- Chandler, A. D. (1977). *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA: Belknap Press of Harvard University Press.
- Chatterjee, S. (2005). Core Objectives: Clarity in Designing Strategy. *California Management Review* 47(2): 33–50.
- Chesbrough, H. and Rosenbloom, R. S. (2002). The Role of the Business model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spin-Off Companies. *Industrial and Corporate Change* 11(3): 529–555.
- Cucculelli, M. and Bettinelli, C. (2015). Business Models, Intangibles and Firm Performance: Evidence on Corporate Entrepreneurship from Italian Manufacturing SMEs. *Small Business Economics* 45(2): 329–350.
- David, B. P. A. (1990). The Dynamo and the Computer: An Historical Perspective on the Modern Productivity Paradox. *The American Economic Review* 80(2): 355–361.
- Demil, B. and Lecocq, X. (2010). Business Model Evolution: In Search of Dynamic Consistency. *Long Range Planning* 43 (2/3): 227–246.

- Doganova, L. and Eyquem-Renault, M. (2009). What Do Business Models Do? Innovation Devices in Technology Entrepreneurship. *Research Policy* 38(10): 1559–1570.
- Doz, Y. L. and Kosonen, M. (2010). Embedding Strategic Agility: A Leadership Agenda for Accelerating Business Model Renewal. *Long Range Planning* 43(2–3): 370–382.
- Doz, Y. L. and Keeley, W. (2017). *Ringtones: Exploring the Rise and Fall of Nokia in Mobile Phones*. Oxford: Oxford University Press.
- Drazin, R. and Van de Ven, A. (1985). Alternative Forms of Fit in Contingency Theory. *Administrative Science Quarterly* 30(4): 514–539.
- Global Innovation Barometer. (2013). Global Research Findings & Insights, General Electric, January 1.
- Goldstein, J. (1999). Emergence as a Construct: History and Issues. *Emergence* 1(1): 49–72. <http://doi.org/10.5815/ijigsp.2012.01.06>
- Hao, J., Hicks, S., Popper, C., and Velu, C. (2020). Realizing the Full Potential of Digital Transformation. *The Conference Board*: 1–26.
- Hart, M., Roberts, M., and Stevens, J. (2005). *Zipcar: Refining the Business Model*. Harvard Business School Case, 9-803-096.
- IBM Global CEO Study. (2006). *Expanding the Innovation Horizon*. IBM Corporation.
- Janeway, B. (2018). *Doing Capitalism in the Innovation Economy: Markets, Speculation and the State*. Cambridge: Cambridge University Press.
- Johnson, M. W., Christensen, C. M., and Kagermann, H. (2008). Reinventing Your Business Model. *Harvard Business Review* 87(12) (December): 1–10.
- Magretta. (2002). Why Business Models Matter? *Harvard Business Review* 80(3): 86–92.
- Markides, C. C. and Oyon, D. (2010). What to Do against Disruptive Business Models (When and How to Play Two Games at Once). *MIT Sloan Management Review* 51(4): 27–32.
- Martins, L. L., Rindova, V. P, and Greenbaum, B. E. (2015). Unlocking the Hidden Value of Concepts: A Cognitive Approach to Business Model Innovation. *Strategic Entrepreneurship Journal* 9: 99–117.
- Massa, L. and Tucci, C. L. (2017). A Critical Assessment of Business Model. *Research* 11(1): 73–104.
- McGahan, A. and Porter, M. (1997). How Much Does Industry Matter, Really? *Strategic Management Journal*. 18(Summer Special Issue): 15–30.
- OECD (2015). *The Future of Productivity*. Paris: OECD Publishing.
- Patzelt, H., Knyphausen-aufse, D., and Nikol, P. (2008). Top Management Teams, Business Models, and Performance of Biotechnology Ventures: An Upper Echelon Perspective. *British Journal of Management* 19: 205–221.

- Robinson, J. (1953). The Production Function and the Theory of Capital. *Review of Economic Studies* 21(2): 81–106.
- Rumelt, R. (2011). The Perils of Bad Strategy. *McKinsey Quarterly* 1(3) (June): 1–10.
- Santos, J., Spector, B. and Van den Heyden, L. (2015). Toward a Theory of Business Model Change. In: N. J. Foss and T. Saebi (eds), *The Business Model Innovation: The Organizational Dimension*. Oxford: Oxford University Press.
- Schumpeter, J. (1939). *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, vol 1. New York: McGraw-Hill.
- Schumpeter, J. (1942). *Capitalism, Socialism, and Democracy*. USA: Harper and Brothers.
- Shih, W., Kaufmann, S., and Spinola, D. (2007). *Netflix*, Harvard Business School Case, 9-607-138.
- Siggelkow, N. (2011). Firms as Systems of Interdependent Choices. *Journal of Management Studies* 48(5): 1126–1140.
- Syverson, C. (2011). What Determines Productivity? *Journal of Economic Literature* 49(2): 326–365.
- Teece, D. J. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning* 43(2–3): 172–194.
- Tripsas, M. and Gavetti, G. (2010). Capabilities, Cognition, and Inertia: Evidence from Digital Imaging. *Strategic Management Journal*. 21(10–11): 1147–1161.
- Van Ark, B. (2016). The Productivity Paradox of the New Digital Economy. *International Productivity Monitor* 31: 3–18.
- Velu, C. (2015). Business Model Innovation and Third-Party Alliance on the Survival of New Firms. *Technovation* 35: 1–11.
- Velu, C. (2017). A Systems Perspective on Business Model Evolution: The Case of an Agricultural Information Service Provider in India. *Long Range Planning* 50(5): 603–620.
- Velu, C. (2018). Cooperation and Business Models (Chapter 31). In: P. Chiambaretto, W. Czakon, A.-S. Fernandez, and F. Le Roy (eds), *The Routledge Companion to Co-Opetition Strategies*. Oxon, UK: Routledge, pp. 336–345.
- Velu, C. (2020). Business Model Cohesiveness Scorecard: Implications of Digitization for Business Model Innovation. In: S. Nambisan, K. Lyytinen, and Y. Yoo (eds), *Handbook of Digital Innovation*. Edward Elgar, Cheltenham, UK. 179–197.
- Velu, C. and Jacob, A. (2016). Business Model Innovation and Owner – Managers: The Moderating Role of Competition. *R&D Management* 46(3): 451–463.

- Visnjic, I., Wiengarten, F., and Neely, A. (2014). Only the Brave: Product Innovation, Service Business Model Innovation, and Their Impact on Performance. *Journal of Product Innovation Management* 33: 36–52.
- Zott, C. and Amit, R. (2008). The Fit between Product Market Strategy and Business Model: Implications for Firm Performance. *Strategic Management Journal* 29(2008): 1–26.
- Zott and Amit, R. (2010). Business Model Design: An Activity System Perspective. *Long Range Planning* 43(2–3): 216–226.
- Zott, C., Amit, R., and Massa, L. (2011). The Business Model: Recent Developments and Future Research. *Journal of Management* 37(4): 1019–1042.