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## *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, Uber, Airbnb, Google, Netflix and Southwest Airlines are firms that are founded on business model innovations, that is, innovations<sup>1</sup>

<sup>1</sup> 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).<sup>2</sup>

<sup>2</sup> 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).

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Moreover, industries that are the most intensive users of information and communication technologies (ICT)<sup>3</sup> 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

<sup>3</sup> 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.

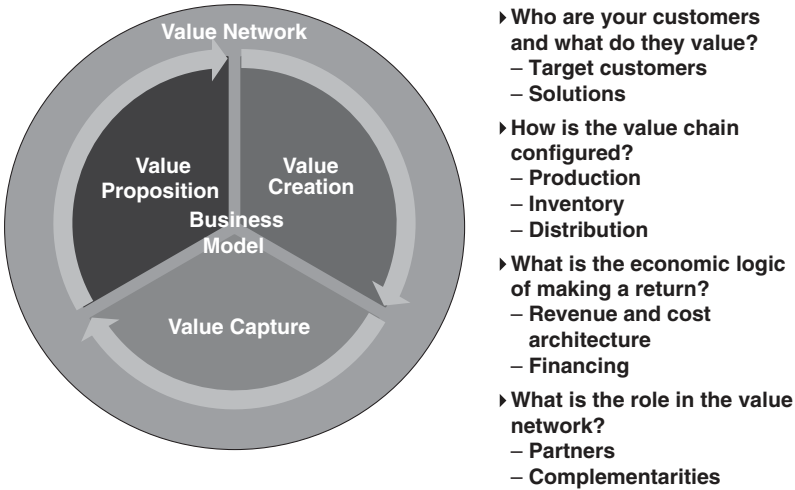
### 1.1 Strategy, Business Models and Tactics

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

## 1.1 Strategy, Business Models and Tactics

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**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.<sup>4</sup> 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

<sup>4</sup> This includes a holistic perspective covering value for all stakeholders.

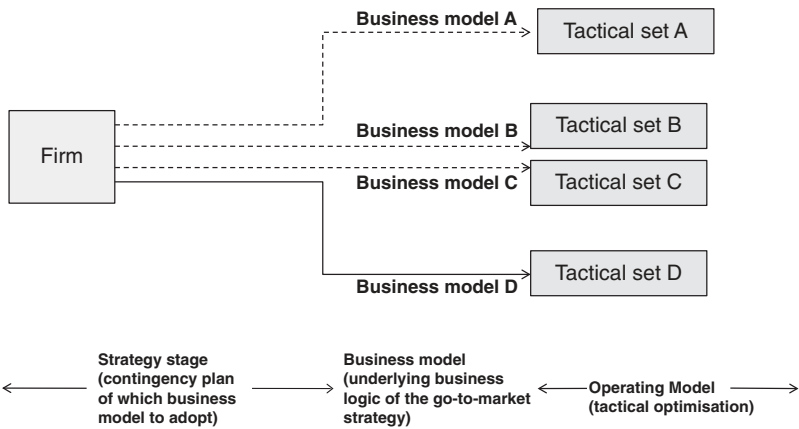
creation and the value network from an existing business – so business model innovation redefines what an existing product or service is, and how it is provided to the customer, by seeking to identify unique configurations of business model attributes (Velu and Jacob, 2016).

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 strategy<sup>5</sup> (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

<sup>5</sup> 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



### 1.3 Challenges to Business Model Innovation

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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 photocopier technology. Xerox launched the 914 dry copier in 1959 when the prevalent technology was wet copiers.<sup>6</sup> 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

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