Editorial: Business model innovation – the challenges ahead

Joakim Björkdahl* and Magnus Holmén

Department of Technology Management and Economics,
Chalmers University of Technology,
Vera Sandbergs Allé 8,
412 96 Göteborg, Sweden
Email: joakim.bjorkdahl@chalmers.se
Email: magnus.holmen@chalmers.se
*Corresponding author

Biographical notes: Joakim Björkdahl is Associate Professor in the Department of Technology Management and Economics at Chalmers University of Technology. In 2011/2012 he was a visiting scholar at Stanford University. His research is on strategy, innovation and business models. He has wide experience of working with strategy, business development and valuation. He has published several articles on business models in refereed journals including *Research Policy*.

Magnus Holmén is Associate Professor in the Department of Technology Management and Economics at Chalmers University of Technology. As a research fellow at the Australian National University he analysed the Australian system of innovation, across sectors. His research interests include business model innovation and industry and university transformation from knowledge based and signalling perspectives. His current research includes case studies and collaborative research with large firms and start-ups. He has published three books and several papers in leading academic journals.

1 Business model innovation – an overview

When competition threatened Hilti's profitability based on sales of power tools the firm implemented a new business model based on a fleet management offering. Adoption of the business model innovation restored Hilti's competitive position and increased its profitability. When Nestlé began selling its Nespresso coffee machines at low margins but with high margins on the capsules, the result was dramatically higher growth and profit margins for the Nespresso business. When IKEA moved from mail order to selling low-cost, disassembled household goods at standardised outlets, this transformed the industry and customers' understanding of what furniture purchases entailed. These examples demonstrate the importance of business model innovation.

The aim of this first Special Issue on business model innovation is to contribute to, and encourage further research on, the phenomenon of business model innovation. The purpose of the present paper is to define and provide an overview of business model innovation. We also introduce the other five articles in this Special Issue and propose seven major challenges for business model innovation research.

So, what is business model innovation and why does it matter for managers and academic scholars? A business model innovation is the implementation of a business model that is new to the firm. Business model innovation is related to the business model and research in this area has increased since the mid-1990s (see e.g. Slywotzky, 1996; Slywotzky and Morrison, 1998; Amit and Zott, 2001; Chesbrough and Rosenbloom, 2002; Magretta, 2002; Christensen and Raynor, 2003; Markides and Charitou, 2004; Morris et al., 2005; Markides, 2006; Björkdahl, 2007; 2009a; Zott et al., 2011). Large parts of this literature focus on different and sometimes contradictory aspects of the firm's business (Morris et al., 2005). In line with others, we argue that the business model describes how the firm creates and appropriates (captures) value (Chesbrough, 2007; Björkdahl, 2007; 2009a; Zott and Amit, 2010; Zott et al., 2011). Firms can offer products and/or services, but these offers are embedded within a system of activities and relationships that comprise the firm's business model (Chesbrough and Rosenbloom, 2002).

How firms create and capture value has been studied and highlighted in several literatures. Some literature streams focus on appropriation of value, while others concentrate on the sources of value creation and the processes involved (Björkdahl, 2007). For example, the strategy literature focuses on how firms can capture more value than competitors, but arguably largely neglects issues related to creating value or finding new sources of revenue. Thus, business model and strategy are different, although the business model is important for the strategy adopted or realised by the firm to compete with other firms (Björkdahl, 2009a; Casadesus-Masanell and Ricart, 2010).

The recent research interest in business model innovation is motivated by the fact that many firms expend enormous time and effort on trying to launch new business models. At the same time academics struggle to make theoretical sense of the recent managerial interest in business model innovation. This is because business model innovation does not seem to sit comfortably within mainstream management research (Jacobides and Winter, 2012). One of the reasons for this is that management research tends to be very general, and cannot account for how business models are built within firms (Baden-Fuller and Morgan, 2010). Specifically, the business model innovation phenomenon includes both creating value for customers and users, and capturing value for the firm, which means that the managerial and organisational explanations in the literature are insufficient or require modification to explain this phenomenon.

1.1 Business model innovation as a new integrated logic

Above we claimed that a business model innovation is the implementation of a business model that is new to the firm. By implementation we refer to the activities conducted before, during and after the "launch" of the firm's new business model.[1] The Schumpeterian view of innovation defines innovation as a novelty of economic value. In other words, it is the implementation of novelty in which the innovation consists of new combinations of existing factors (McKelvey and Holmén, 2006). A business model innovation is often contrasted with a product or service innovation which consists of implementation of a product or service that is a significant improvement or is new to the firm or to the world with respect to its characteristics or intended uses. A business model innovation does not discover a new product or service; however, it may redefine an existing product or service, how it is delivered to a customer and/or how the firm profits from the customer offering (Björkdahl, 2009b).

Some economists view a business model innovation as a specific type of process innovation focused on the internal organisation of flows of information (Swann, 2009). However, novelty that creates value is a fundamental aspect of a business model innovation. A business model innovation can include a process innovation, a new revenue model or other types of innovation. Therefore, we argue that a business model innovation is a *new integrated logic* of how the firm creates value for its customers (and users) and how it captures value. In this view, a business model innovation is not a 'mere' product or service innovation, nor is it a process innovation. In the general case, a business model innovation may include new ways for the firm to create value and new firm offers (e.g. product or service innovations), new ways for the customers to view the firm's offers (positioning innovation), changes to how the firm views its activities (paradigm innovation) and operations (process innovation). Thus, a business model innovation is a new integrated logic of value creation and value capture, which can comprise a new combination of new and old products or services, market position, processes and other types of changes.

1.2 New to the world or new to the firm?

The Fortune 500 list of companies shows that many recent entrants are companies that have radically transformed established industries or created completely new ones. Examples include Apple, Southwest Airlines, Google and Wal-Mart. Are these examples typical? The Oslo manual (OECD and Eurostat, 2005) defines an innovation as the implementation of a new or significantly improved product, service, process, or marketing method, or a new organisational method in business practice. The minimum requirement for an innovation is that it must be new to (or significantly improved for) the firm. Thus an innovation does not need to be novel to the world. If we follow the spirit of the Oslo manual definition of innovation, we can argue that a business model innovation need not cause a major upheaval to the industry, although, of course, some business model innovations transform entire industries. While Johnson et al. (2008) emphasise that there is no point in instituting a new business model unless it is game-changing for the industry, we would argue that this reasoning overlooks the fact that, from an evolutionary or experimental perspective it is often difficult or impossible to see which business model experiment will ultimately be industry game changing. In line with Amit and Zott (2010) we argue that it is necessary to innovate the business model even if it may not be game-changing for the industry.

We suggest that business model innovation is a pervasive phenomenon that encompasses ongoing experimentation among and in firms, much of which may not be successful or may not have a wide impact. We suggest also that, depending on its characteristics, the firm may be operating several different business models: one may be dominant but large established multidivisional firms often compete on the basis of several different business models.

1.3 Why now?

Why is the business model innovation phenomenon so important? Obviously, firms can find it problematic, time consuming and risky to create and launch a new business model; incumbents find it difficult to respond to new entrants' business model innovations, but their implementation could make the firm more competitive. However, we believe there

are several reasons why business model innovation is important, and why at this particular time it should be high on the research agenda. One reason is the familiar Smithian/Youngian explanation that a larger market allows more potentially economically viable specialisations. Increased firm specialisation increases the scope and ability of firms to change their business models in part because of the bigger choice space "out there", related to the resources and activities they can draw on. At the same time, the internationalisation of markets and competition has led to commodification of manufacturing which makes it more difficult for firms to charge premium prices for product superiority or to profit from superior manufacturing capability. This is forcing many firms to rethink their business models because it is no longer enough to compete only on products or manufacturing processes.

Obviously, business model innovation is reflected in the empirical reality of individual firms. For decades, many successful firms employed one dominant business model that represented their key business logic choices. They often integrated manufacturing, in-house R&D and product sales based on per-unit prices (Slywotzky, 1996). This pattern has been changing and external collaborations and outsourcing, for example, have become more important for firms. Many firms have responded by moving downstream to become systems integrators, adding complementary services, selling bundled products and services, or changing their revenue models. This is requiring firms to have more extensive repertoires to appropriate value. They are involved in financing, solutions, value sharing, downstream participation in the value chain, licensing, and so on (Björkdahl, 2009b). This means that choosing the right business model is a more open ended endeavour involving a large choice set.

It has been claimed that business model innovation has a greater impact on profit margins than other types of innovation (IBM, 2006). Firms addressing the same customer segment with similar value propositions (hence similar product-market fit) may have very different business models which produce radically different results. Studies show that failure to find an appropriate business model results in the customer offering yielding less value than it might (Chesbrough and Rosenbloom, 2002). Hence, similar product or service offerings can result in radically different performance depending on the business model (Chesbrough, 2010).

For all these reasons, it is not surprising that business model innovation is an emergent research field. From a scholarly perspective, despite some important early contributions, business model innovation is a poorly investigated phenomenon (Slywotzky, 1996; Slywotzky and Morrison, 1998; Amit and Zott, 2001; Chesbrough and Rosenbloom, 2002; Magretta, 2002; Markides and Charitou, 2004; Morris et al., 2005; Markides, 2006; Björkdahl, 2007; 2009a; 2011; Brink and Holmén, 2009; Chesbrough, 2010; Teece, 2010; Demil and Lecocq, 2010; Osterwalder and Pigneur, 2010; Zott et al., 2011). There is much anecdotal evidence and many potentially relevant explanations. However, business model innovation remains much discussed but poorly understood, implying an urgent need for guidance, methods and rigorous empirical evidence.

2 Articles in this special issue

This Special Issue includes five papers. Three are primarily theoretical although they contain empirical sections; two are primarily empirical.

'An explorative model of business model scalability' by Georg Stampfl, Reinhard Prügl and Vincent Osterloh departs from the fact that while much has been written by practitioners and academics about business models, there are no systematic or serious attempts to identify and analyse the factors that make a business model scalable. In their view, a scalable business model refers to its ability to increase revenues faster than the corresponding cost base (which should not be confused with a scalable technology). Although they do not devote much space to discussing the matter, their argument is underpinned by the idea of increasing returns to production (e.g. economies of scale) and adoption (e.g. network effects).

On the basis of a literature review and interviews with entrepreneurs and investors, they identify key factors in business model scaling and some consequences of scalability. Their discussion is illustrated by examples of well-known Internet-based firms. Their results show that the factors that influence business model scalability include technology, cost and revenue structure, institutional adaptability (i.e. adaptability to different legal regimes), network effects, and user orientation. Their firm examples include Salesforce.com which automates processes (technology), Groupon which suffered from an expanding cost base as revenue increased (cost and revenue structure), Spotify which managed to deal with intellectual property management issues in many countries but experienced problems in Germany (institutional adaptability), and Facebook where users invite friends and where a growing network attracts new users. These examples highlight how user orientation, the relative ease of use of a firm's products or services, can help or hinder company growth. The authors argue that scalability should be addressed through a business model conceptualisation.

The nature, structure and processes in business model innovation are central problems. Based on a literature review of innovation management process models and 14 case studies, 'The 4I-framework of business model innovation: an analysis of the process phases and challenges' by Karolin Frankenberger, Tobias Weiblen, Michaela Csik and Oliver Gassmann, creates a framework for understanding business model innovation processes. The proposed framework consists of four high level phases: initiation, ideation, integration and implementation. For each phase the authors identify a set of challenges which they suggest are likely to be more prominent in that particular phase.

Their framework consists of sequentially dependent phases and they show empirically that business model innovation processes are quite structured from the perspective of their high-level framework. At the same time they acknowledge that there may be iterations between phases and argue there are three major feedback mechanisms that might turn business model innovation on its head. First, changes in the eco-system may affect the firm's external fit. Second, mismatches among the firm's internal resources may force the firm to pivot – which they argue is most likely during the integration phase. Third, a feedback loop that typically emerges during the implementation phases can result in mismatches between business model structure and model conceptualisation.

'Business model innovation from an open systems perspective: structural challenges and managerial solutions' by Henrik Berglund and Christian Sandström develops a set of propositions for understanding the boundary transcending nature of business model innovation. These propositions are based on a set of literatures dealing with the probability of boundary spanning business innovation being successful depending on the nature of the involved firms, knowledge transfer, incentives, and the appropriation regime.

At times, business model innovation cannot be understood without considering the co-evolution of the industrial ecology and firms' business models. 'Business model innovation in the aviation industry' by Sabrina Schneider, Patrick Spieth and Thomas Clauss discusses an industry where institutional changes and industrial transformation have made business model innovation 'inevitable'. To investigate how external factors trigger business model innovation, workshops were held with 12 companies that had undertaken business model innovation; these were followed up by interviews with experienced managers from each of the firms. The findings show that Maintenance, Repair and Overhaul (MRO) firms in the aviation industry undertook two distinct forms of business model innovation, namely customer benefit and co-creation of value.

A central question for organisations is how to create and maintain fit between their operations and their context. From a business model innovation perspective, firms need to maintain a fit between their product market strategy and their business model. 'Retaining fit between business models and product market strategies in changing environments' by David Klang and Fredrik Hacklin addresses this issue in the specific case of technological convergence. Based on case studies, the paper identifies three behavioural patterns that enable and affect the firm's business model innovation while supporting changes in its product market strategy. These are described as infringing, orchestrating and riding patterns. In the infringing pattern, firms maintain their activities and increase their ownership of relationships with suppliers and customers. In the orchestrating pattern, firms foster a community or a network structure based on their technological platform. The riding pattern means that firms collaborate with other (large) firms in conjunction with policy making organisations. In some cases, all three patterns co-exist.

3 Grand challenges

Work on business models serves as a springboard to investigate how firms create and capture value; business model innovation research investigates how firms implement new business models that affect the firm and its customers, and also competitors and the eco-system of firms. Despite recent work there are many unanswered questions. We propose a research agenda to inspire further research on business model innovation. The discussion is organised around the themes of: (1) Definition and characterisation of business model innovation; (2) Managing business model innovation (in established firms); (3) Experimenting, testing and implementing new business models; (4) Business model scalability; (5) Profiting from business model innovation; (6) Business model innovation and changes in the eco-system and (7) The role of capabilities for business model innovation.

3.1 Definition and characterisation of business model innovation

An obvious grand challenge related to work on business models is the disagreement among scholars about what a business model is (Zott et al., 2011), which makes it problematic to refer to its *innovation*. One reason why scholars so far have failed to develop a single understanding or definition of business model is that idiosyncratic definitions are applied, to suit the purpose of the particular study or paper. In addition, the concept of business model frequently is used to refer to anything related to firms and

their business. The lack of a coherent definition of business model has given rise to a number of business model innovation questions that research could address (see Table 1). We argue that a major issue for business model innovation scholars is clarity in relation to what constitutes a business model innovation, what is 'merely' an upgrade of an old business model and what is a product innovation for example. There is a need for detailed descriptions and analyses of business model innovation, including failures, and fewer ex post success biased studies of a few internationally well-known (and over-cited) firms. These descriptions should be complemented by surveys and other quantitative approaches to answer such basic questions as how common is business innovation, how time consuming is it, and how costly and how profitable are different types of business model innovations.

Table 1 Themes and questions for business model innovation

Definition and characterisation of business model innovation
• Business model innovations - what are they and how do they differ from other business model changes?
• How common is business model innovation and how difficult (time consuming, attention, costly) is it?
• How do customers respond to different types of business model innovations? How do these reactions affect the innovating firm?
• What concepts, models, frameworks and theories are needed to explain business model innovations, and why?
• What is the relation between product, service and process innovations on the one hand, and business model innovation on the other?
Managing business model innovation (in established firms)
• How do firms work with business model innovation and how can they do it systematically?
• How are business model innovation processes organised, and how well do they function, and why?
• How do and should firms overcome organisational inertia to innovate their business models?
• How can the uncertainties involved in business model innovation be reduced?
• How can established firms work with new business models when they have existing business models up and running?
• How can established firms innovate their business model when not under pressure?
• How do and should firms interact with users in order to manage their new business model creation?
• In what circumstances do several business models co-exist in the firm and how can this be managed?
Experimenting, testing and implementing new business models
• How do firms experiment with new business models? What are the "best" processes?
• How can firms test new business models in an efficient and cost effective manner?
• Are there patterns to business model innovation?
• How should firms implement changes in their current business model?
• What is the role of users in business model experimentation?

Table 1 Themes and questions for business model innovation (continued)

Business model scalability
• How can firms design scalable business models?
• What are the most critical business model elements required to achieve a scalable business model?
• When is a business model scalable?
• How can the firm "know" whether it has a scalable business model?
Profiting from business model innovation
• In what circumstances are business model innovations (almost) non-imitable and why?
• Is there first mover advantage involved in business model innovation? When and why?
• What makes business model innovation profitable?
• What business models are more likely to fend off competing business models or imitators?
• Are some business model element changes more profitable than others?
Business model innovation and changes in the eco-system
• What types of business model innovation affect the eco-system? How?
• How do eco-systems affect patterns of business model innovation?
• What business model innovations are the most profitable for a given type of eco-system?
The role of capabilities for business model innovation
• What is the role of capabilities in business model innovation?
• How does business model innovation affect the firm's capabilities and why?
• How do changes in capabilities affect the firm's motivation and ability to undertake business model innovation?
• How can the capability literature contribute to understanding business model innovation?

3.2 Managing business model innovation (in established firms)

The journey from an idea for a business model innovation to its implementation and then acceptance by users and a market success is very long and many managers feel it is too difficult and too uncertain. However, if firms are to innovate their business models successfully and frequently, this should not only be in response to crisis. A current problem for most – perhaps all – firms is that there is no single individual in the organisation responsible for business model innovation, which contrasts with the situation related to technological innovation for example.

So who should be responsible for innovating the business model; should it be the chief technology officer, the chief executive officer, the chief operations officer, the vice presidents or an innovation manager, or should it be a collective responsibility in the organisation? Our experience shows that the person responsible for business model innovation is often the chief technology officer. However, he or she may lack the cognitive framing, ability, motivation and aspiration required to innovate the firm's business model. In addition, from an organisational perspective and unlike product innovation, routines for business model innovation are often not in place, although at higher levels, as Frankenberger, Weiblen, Csik and Gassmann suggest in this Special

Issue, the processes for innovating the business model may be quite structured. This is not to suggest that routines and operational processes for any type of business model innovation can or should be created; but it is an area that needs further research. An important research question is how to organise business model innovation, and in what circumstance routines and prescribed processes can be created. A fundamental question for research on business model innovation involves the interplay between business innovation and strategy realisation. More research is needed to link business model innovation with the literature on strategy and strategic action. The firm's business model tends to remain more fixed than the firm's strategy, and therefore it would make sense to conduct research on how and to what extent firms can use the business model to realise their strategies.

While investment in business model innovation may be worthwhile there are many factors that can prevent initiation and implementation of a business model innovation. For example, during the early phases of discontinuity before the switch to the new business model, there are no signals from customers to force incumbent managers to consider a change (Christensen, 1997). The result is that the current business model often continues unchallenged until it is too late for a change to recover lost business. In other cases there can be lock-in to the existing business model, which is reinforced by the fact that top management achieved their positions by executing the current business model. They may be reluctant to investigate solutions that require deviation from the current business model (Chesbrough, 2007).

Top managers tend to favour changes they see being implemented by other firms in the same industry (Spender, 1989). The business model can be seen as part of the industry recipe in which managers operate and respond to a shared set of ideas (Björkdahl, 2007). In addition, many firms are hesitant to allocate resources to business model innovation. Therefore, business model innovation research would benefit from drawing on the literature on organisational inertia describing how the cognitive framing, capabilities and incentives in the established business model can lead to lock-in.

There are also external barriers that might promote business model inertia as shown in the paper by Berglund and Sandström in this Special Issue. Therefore it is important to find ways for firms to deal with this challenge. Resources and authority must be assigned for formulation of and experimentation with new business models in ways that reduce uncertainty for top management.

3.3 Experimenting, testing and implementing new business models

How do firms experiment and test new business models? In business model innovation it is important to experiment with new ideas in a systematic way that reduces uncertainty (Murray and Tripsas, 2004). It has been argued that to exploit new business models, firms need to undertake significant experimentation (Gunther McGrath, 2010). However, why and how firms can test new business models is mostly neglected in the literature. One way would be to adopt the method described by Blank and Dorf (2012) where business model innovation is driven by a customer development process. In Blank and Dorf's approach the firm starts with a set of hypotheses which are tested through a customer validation process. If the hypotheses are not valid, the firm needs to change its hypotheses by doing pivots. If they prove valid the firm then commits resources to scale up the business model. A major challenge related to business model innovation is to

understand how firms can try out new business models in efficient and effective ways. It is important to understand whether there are patterns to how firms change their business models and which patterns are most likely to be successful.

There are potential problems in implementing a new business model and abandoning an existing business model. It may be useful to run both models separately to decide whether one is superior (Björkdahl, 2007). Research should investigate in what circumstances, how and for how long firms should operate parallel business models.

3.4 Business model scalability

What makes a business model scalable? This might seem a rather trite question since it could be argued that if the increase in income is greater than the increase in costs, the business model is scalable. However, formulation and interpretation of what makes a business model scalable are debatable because scalability can be defined as achievement of a marginal income greater than or equal to the marginal cost or an increase of any size that ensures that average income exceeds average cost within some defined margins. We argue that further research is needed into what constitutes a scalable business model, including comparisons among different industries.

How do firms design scalable business models? The article by Stampfl, Prügl and Osterloh in this Special Issue shows that building scalable business models is not easy. Business models built around achieving a high in-flow of users typically need to be scalable. Take the example of the music services Spotify and Pandora Radio. While both distribute and stream music, their services are built according to two different business models. Spotify directly negotiates rates for distributing music with its copyright owners (the big recording labels); Pandora pays royalties through a third party intermediary and has been less successful in building a scalable business model based on this set-up. Hence, the grand challenge for firms and scholars alike is to understand when a business model will work for a larger scale of users and operations. This involves research questions such as what are the mechanisms for designing a scalable business model, and how at an early stage can the firm know whether or not it has created a scalable business model?

3.5 Profiting from business model innovation

By definition, a new business model includes the (new) way that the firm captures value from its customers and users. This requires knowing how to set up a business model to obtain profit and what types of business model innovations are likely to be more profitable than others. Recall that the appropriability regime and industrial architecture largely explain how product innovators are able to prevent value slippage to other actors (Teece, 1986; Levin et al., 1987). However, whether, how and to what extent this applies to business model innovation requires clarification. One aspect is “timing” which is discussed in the first mover advantage literature (Lieberman and Montgomery, 1988). Although a business model innovation might change the dynamics of an industry quite dramatically, it is uncertain whether the innovation will reward the innovator (Jacobides and Winter, 2012). Business model innovations, although often more difficult to imitate than products or services, are imitable, so it is necessary to understand the types of assets or capabilities that can be used to protect the new business model.

3.6 Business model innovation and changes in the eco-system

Adner (2012) stresses that the likelihood and ability of firms to profit from their business model innovation depend crucially on the extent to which other actors need to innovate (co-innovation) or to change their behaviour to allow the focal firm to profit from its business model innovation. There are several examples of changes to firms' business models changing the industry and the way that firms compete and collaborate in that industry. This suggests that "getting this right" will bring business success. This raises the question of which types of business model innovation are more likely to affect the eco-system and in what circumstances?

On the other hand, the eco-systems of suppliers, competitors and other actors both enable and constrain how successfully firms can innovate their business models as Berglund and Sandström point out in their paper in this Special Issue. An important question for research is how the setup of the eco-system affects the speed and pattern of business model innovation. The paper by Schneider, Spieth and Clauss in this Special Issue discusses how a change in one industry enabled the creation of a new specialised industry with two distinct new business models. More generally, we would argue that the business model(s) and the eco-system of actors co-evolve but further research is needed to identify and analyse the mechanisms or sources of the changes.

3.7 The role of capabilities for business model innovation

The capabilities discussion relates most to the firm and its ability to develop new products and services. However, with a few exceptions, the way capabilities change, fosters and shapes business model innovation and vice versa has not been dealt with in the literature (Brink and Holmén, 2009). We would emphasise that capabilities and changes to them can contribute positively to business model innovation and to the evolution of the business model. At the same time, business model innovation shapes the emergence and evolution of capabilities (Brink and Holmén, 2009; Jacobides and Winter, 2012). We argue that important research questions include how capabilities contribute to business model innovation and vice versa.

This introduction to the Special Issue has presented and defined the business model innovation phenomenon, and provided a brief overview of the papers in this issue of the journal. We have highlighted seven, partly overlapping themes, which we argue should inform future work on business model innovation. We hope that this Special Issue constitutes progress in scholarly work on this important area.

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Note

1 It is often difficult to state exactly when a new business model is launched; for simplicity, in this paper, we ignore this issue.