Business Model Dynamics in Business-to-Business Environment
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Abstract

Purpose of the article: The purpose of this article is to contribute towards a clarification of the emerging term of the dynamic business model, with focus on the business-to-business environment. The business model dynamics are confronted both with the static view, and with business model innovation.

Methodology/methods: Secondary research has been conducted.

Scientific aim: The article aims to help filling the gap in ambiguous understanding and interpretation of the term “Business model dynamics”.

Findings and conclusions: A dynamic business model is an abstract construct formed by components and their synapses that change over time due to both external and internal forces, thus creating new synapses and synergies supporting adaptation to the changing ecosystem. The business model dynamics in the business-to-business environment are frequently of rather an incremental and slower nature. The phenomenon is caused particularly by the role a focal firm plays in the supply chain, by the resistance of its down-stream customers and by the customer of customers, to change.

Research limitations: Due to the ambiguity of the term business model, increasing popularity of the subject and an enormous number of published scholarly articles dealing with the topic of business models, a risk exists that not every relevant source has been included in the review.

Practical Implications: The firm’s capability to adapt its existing business model can be impacted by organisational rigidity. However, in reaction to a changing business environment, customer preferences and pressure from multiple stakeholders, firms need to adapt their value proposition, search for new, original ways of value creation, thus satisfying explicit or latent customer needs.

Originality/Value: The article draws widely from the recently published scholarly literature on the business model subject. The main contribution of the article is a systemisation of fragmented views on the dynamic aspects of the business model, precision of the term itself and its distinction from the static view.

Key words: business model dynamics, business model innovation, business-to-business, dynamic capabilities.

JEL Classification: L26 O3

1. Introduction

The Business model (further referred to as BM) has been in the focus of scholarly research in the recent years. The number of scholarly articles published in the field of BM has increased significantly, particularly over the last decade (Blahová and Pálka, 2017). Despite that, a unique, and among scholars widely accepted understanding and definition of the term BM, has so far not been reached.

Value creation, delivery and capture emerged as typical purposes of a BM, repeatedly referred to in the scholarly literature. One of the widely accepted descriptions of a business model of a firm is „the logic, how the firm makes money“, or, the way how the firm „creates, delivers and captures value“ (Osterwalder and Pigneur, 2010). Cavalcante et al. (2010, p. 2) call the BM “an abstraction of the principles supporting the development of the core repeated standard processes necessary for a company to perform its business.” Casadeus-Masanell and Ricart (2010) describe the BM as a “reflection of the firm’s realized strategy”. They see the BM as an object, being characterized by its content, structure and
governance. Spieth and Schneider (2016) see the BM as facilitation of an opportunity, new ideas and technologies.

Famous contributors to the BM field, also known widely in the Czech environment, are Alexander Osterwalder and Yves Pigneur, who created the so called “BM Canvas”, introduced in a book “Business Model Generation: a handbook for visionaries, game changers, and challengers”, published 2010. However, dozens of scholars and scientists are researching and regularly publishing in the field of the BM - Baden-Fuller, Casadesus-Masanell, Chesbrough, Demil, Teece, Zott - to name at least a few, following the publication and citation research conducted by Blahová and Pálka (2017), although a comprehensive list of authors would be significantly longer.

A clear focus of many researchers so far, however, was the BM from a static point of view. They study the business model topic particularly from its ontological perspective – aiming to define the term itself, to establish a normative basis on what a typical BM looks like, what the typical BM components are. Osterwalder and Pigneur (2010) have identified nine so called building blocks of a typical BM – key partners, key activities, key resources, value proposition, customer relationships, customer segments, delivery channels, cost structure, and revenue streams. These are specific dimensions of the otherwise abstract construct of a BM.

Another stream of research focuses on BM taxonomy, on identification and categorization of the various archetypes or patterns of existing BMs in place. E.g. Gassmann et al. (2014) have identified 55 various BM archetypes across numerous fields and industries. One of the purposes of their research is to help practitioners during the process of the BM innovation, thus reshaping the existing BM while following an established pattern.

In order that a firm can survive in a fierce competition and a rapidly changing environment, innovation performance is one of its key capabilities. A typical innovation in a firm or in an industry can be either product, process or business model related, or possibly a combination of two or even all three. BM innovation (further referred to as BMI) emerged lately as the promising option of the firm’s innovation activities. The IBM study (IBM, 2006) has borne out that a significant number of top managers across various industries see the BMI as an increasingly powerful tool, therefore becoming undoubtedly their focus of interest. Particularly, companies that do suffer from a lack of resources required for a product or process innovation, can leverage on business model innovation instead (Amit and Zott, 2012). However, the BMI, although powerful, is a challenging task due to due to the inherent immateriality of the BM (Wirtz, 2016).

One of the key attributes of a successful and sustainable BM is its difficult replicability through existing or potential competitors (Teece, 2017). Every single BM can and probably will be, sooner or later imitated, as long as it creates a sustainable economic value. Aiming to hinder the competitors in copying and thus sustaining the value created and captured, a company’s possession of one or several unique tangible or intangible assets, inherent in BM, is important. Typical examples are tacit knowledge, explicit specific skills, patents, exclusive agreements, and access to scarce resources.

A successful BM is a system of components or so-called building blocks. Typically, in dynamic business models, the elements reinforce each other.

As long as one or more are modified or removed, the BM is not the same any longer. Accordingly, aiming to copy just some attributes of a BM, without having created a well harmonized, balanced, and functional system, where single components are in synergy and reinforce each other, will likely not be successful.

Firms often face an ambidexterity problem, when introducing a new or significantly modified BM. The ambidexterity is understood as the ability of simultaneously running both the existing BM, while fully exploiting it, and a new business model that is about to be explored (e.g. Khanagha et al., 2014, Kranz
et al., 2016, Markides, 2013). Ambidexterity is particularly relevant for established firms, with well proven BMs. The risk of not letting an emerging BM flourish is enormous, due to internal resistance, rigidity, or inability to change. Path dependence as an inhibitor of the BM change has been mentioned as well (Brunninge and Wramsby, 2014).

Given the ambiguity of the term business model dynamics, the paper’s main purpose is to shed light and propose an answer to following BM related questions:

1) How do the terms static and dynamic view of business models differentiate from each other?
2) Is the term BM dynamics a synonym to business model innovations?
3) What are the drivers of the business model dynamics?
4) What are the particular aspects affecting the dynamics of the business model in the B2B environment?

2. Research method

A primary literary source review on articles published in peer-reviewed journals has been conducted. A search engine, used at Brno University of Technology, called „PRIMO“ – a comprehensive searching tool fetching data from various renowned scientific databases – was used for an initial search. A boolean search logic string: "dynamic$ business model*" OR "business model* dynamic$" OR "dynamic$ of business model$" was applied. A PRIMO displayed 377 sources. A narrowing down the search to the peer-reviewed journals resulted in 112 primary sources, all published between years 1996 and 2017.

Titles and the abstracts of the 112 articles have been reviewed. In the end, a set of 15 articles has been identified as highly relevant for the purpose of the study and studied in depth. The review also led to the identification of several other, primary scholarly sources, mentioned in the text and in the references of the initial 15 articles.

The article also sources from the author’s earlier, unpublished essay submitted to Brno University of Technology, on the topic of Business Model Dynamics (Krmela, 2017).

3. Results

3.1. Static vs. dynamic view of business model

It can be stated that what makes a successful BM is a combination of both carefully designed and well-balanced components – the static view - and the ability of the business model to evolve over time – the dynamic view.

The static view is often concerned mainly with the components of the BM itself. On the contrary, the dynamic view deals with changes in the BM caused by endogenous (firm’s internal) or exogenous (firm’s external) forces and processes.

Cavalcante et al. (2011, p. 1338) claim that “the boundaries of a business model must first be identified before it can be determined whether a change initiative will affect it [BM] or no, and (if so) to what extent.” Their claim clearly implies that understanding of the static view of the BM is essential for determination of the extent of BM dynamics.

Cavalcante et al. (2010) – a change of main repeated standard processes means change of the BM. The BM dynamics is in their view: BM creation, extension, revision, termination. This view can be
understood as a life cycle of the firm. Particularly the extension and revision can be seen as the life cycle stadiums, attributable to dynamic. Both mean a change of organisational processes; therefore, they mean higher demands or complications. Rigidity, and organisational stubbornness are possible inhibitors of the change.

Haggege et al. (2017) similar to Demil and Lecocq (2010) suggest that a combination of both static and dynamic perspectives makes a business model work.

Roberts et al. (2012) see BM dynamics dependent on a firms’ absorption capability for new knowledge as well as an ability to identify new potential. In their view, important abilities are coordination and socialization, as well as outside-in, inside-out and expansion abilities. Outside-in, combined with complementary coordination abilities have positive impact on a company’s abilities to identify knowledge/wisdom.

Gay (2014) speaks about BM dynamic in firms´ networks as a relatively insufficiently researched field. She mentions value proposition and cooperation in the firms’ network as main components defining BM dynamics.

Demil and Lecocq (2010) speak about “dynamic consistency” of the firm, enabling change of the firm’s BM while maintaining and creating a sustainable performance. In their opinion, BM dynamics stem from interactions between and inside the key BM components. They claim, that the BM is impacted and changes both through external and internal factors. Internal factors are particularly company management’s specific decisions, as well as results from dynamics between single BM components or inside them. External factors are generally the business ecosystem - namely new competitors, substitutes or an impact through resources.

3.2. Business model dynamics vs. business model innovation

Are BM dynamics, and BM innovation one and the same? Both mean that the current BM changes, as do the terms BM evolution, and BM transformation. In terms of “BM change”, all four expressions appear to be synonymous.

There seems to be an ambiguity in the understanding of what BM dynamics are and what BM innovation is, as well as what the real difference between these two terms is. The reviewed literature indicates, that a major change in the BM would be probably categorized as BM innovation, rather than BM dynamics. The latter could be understood as the ability and capability of the BM to change incrementally, in smaller steps, and gradually. It means a permanent adjustment and adaptation of the existing BM and its components. However, the core logic remains to the large extent maintained.

Souto (2015, p. 145) sees BM innovation as a new configuration of that, what is made in the firm and how it is made for the purpose of creation of new value proposition. Innovation includes finding and satisfying unsatisfied needs or finding and solving customers’ problems.

BM innovation is likely to lead to a more radical change of BMs. It requires more than one building block to change significantly. Gassmann et at. (2014) say that approx. 90 % of all new BMs are created through transformation and new configuration of the existing BM, a process they call a “creative imitation”. They also claim, that at least two of the four BM dimensions (Who – customer, What – value proposition, Why – revenue stream, and How – value creation) need to be changed, in order for a BM to be considered innovated.

On the contrary, BM dynamics lead rather to an incremental change of the business model. Single building blocks remain unchanged. A primary logic of the business remains unchanged. A dynamic view
of a BM acknowledges, that a BM evolves over time. Cosens and Noto (2017) claim BM dynamics being a BM’s ability to change swiftly in reaction to changing environment.

The dynamics can be caused by internal, endogenous factors, and by external, exogenous factors. The former means mainly a company’s abilities to change its BM. Teece (2017) calls such abilities “dynamic capabilities”. The latter considers mainly influence and impulses coming from the environment, from the ecosystem of the firm. These are either of microeconomic nature – suppliers, customers, new market opportunities, technology – or of macroeconomic – particularly regulations and demography.

Demil and Lecocq (2010) suggest the BM dynamics as a crucial ability needed for a long-term sustainability of the firm. They advocate a combination of both static and dynamic views of the BM as the key to success of the enterprise.

Gassmann et al. (2013) claim, the reasons for losing a competitive advantage to be the rigidity of the company’s BM, or its poor adaptation to the changed ecosystem. Accordingly, if competitive advantage is the essential contributor to a firm’s sustainability, then BM dynamics are essential enablers of sustainability.

Ricciardi et al. (2016, p. 5487) say that “…business model innovation, per se, is not sufficient: business models must evolve adaptively, that is, business models must change consistently with the firm’s evolving economic, ecologic, social and technological environments.” In their view, entrepreneurial and organizational learning, organizational ambidexterity, and dynamic capabilities, are the main enablers of business model innovation.

Willemstein et al. (2007) claim a value-added progress being a main driver for a shift in a BM, particularly the development of new products.

Achtenhagen et al. (2013) identify critical capabilities enabling dynamics of business model being:

- Identification of opportunities, readiness to experiment
- Balanced use of resources
- Coherence between leadership, culture, and employee commitment

Haggege et al. (2017) identify cultivation of strategic awareness as well as the development of capacity to reconfigure as two key drivers contributing to the BM dynamic.

Rodriguez-Donaire (2012) examined BM dynamics in small-medium enterprises for Catalonia/Spain, caused by introduction of social media and found out, that social media supports the transformation, but is not enough to change the BM on its own.

Demil and Lecocq (2010) see BM dynamics triggered by a combination of resources, competencies, organization, and values.

Cavalcante et al. (2010, 2011), Ning et al. (2011), Dai et al. (2011) see scope limitations of the BM dynamics and distinguish between BM creation, extension, revision and termination. Cavalcante (2011, p. 1336) further posits, that the main driver of the BM dynamics is an “individual’s ability to recognize the need for change”, hand in hand with “the will to promote and implement such change.”

Spieth and Schneider (2016) see opportunity development and commercialization of new ideas and technologies as the dynamic and transformational perspective. In their view, the dynamic perspective of the BM is an enabler for opportunity development and commercialization of new ideas and BM technologies.

In terms of BM change extent, Wirtz (2016, p. 268) differentiates change models:

- Stabilisation – adaptation of the value proposition to the changed environment (for example tobacco industry)
- Evolutionary-adaptive – incremental, step-by-step change (for example Intel)
- Extension – on the current market, new value proposition, significant change of single BM components (e.g. Southwest Airlines)
- Migration – significant change, new synapses of the existing components of value proposition, BM differentiation, incremental differentiation of the parts (for example Ikea)
- Radical-innovative – disruptive, new structure, change of the industry (Nokia)

Business models must be therefore dynamic, since the ecosystem is evolving, and today’s successful, innovative BM might become ordinary and old tomorrow (Nielsen et al., 2013).

Rodriguez-Donaire (2012, p. 375) defines dynamic capability as “…strategic capabilities of the firm which help to modify the company structure by combining resources, such as support, complementarity and the level of team involvement of the company, in order to adapt to change in a flexible and quick way.” and introduces the “participatory business model” which is fuelled by dynamic capabilities, abilities to learn, the efforts made, implementation time and customer participation (Rodriguez-Donaire, 2012).

3.3. Firm’s business model dynamics enablers and inhibitors

Osterwalder a Pigneur (2010, p. 207) specify the following main driving forces impacting BM change and influencing its dynamics:

- Key trends – technological, regulatory, societal and cultural, socioeconomic
- Industry – suppliers, competitors, potential competitors, substitutes, stakeholders
- Market forces and trends – segments, costs of change, attractiveness, needs and problems
- Macroeconomics – global market, capital market, commodity market, economic infrastructure

Voelpel et al. (2004) identify mainly deregulation, privatisation, technology change and globalisation as main factors of rapid and unpredictable changes of the environment.

These can be categorized as a firm’s external factors, the exogenous factors, impacting the BMs.

We posit that the dynamics from both from exogenous factors, as well as from endogenous. The endogenous, company internal factors, can be called BM dynamics enabling capabilities. The scope of their impact and the level of protrusion is partially dependent on a firm’s organizational flexibility. It is crucial that the top executives are ready to change. Demil and Lecocq (2010, p. 241) see three main management tasks related to BM dynamics:

- Monitoring of risks and uncertainties, that could have a permanent impact on the BMs.
- Prediction of the impact of internal changes, as well as ecosystem changes.
- Participation in activities and assurance of harmony among single components of the BMs.

Teece (2017) speaks about dynamic capability as an organisational capability to change business models and opportunity calibration. Strong capabilities are opportunity sensing and seizing, as well as organisational and company culture transformation towards ability to deal with threats and opportunities as they come.

Dynamic capability – is the ability to continually revalue, renew and reconfigure a firm’s resources base (Cavalcante, 2014, p. 450). He refers to experimenting and learning as predecessors of BM change and suggests a learning period as a possibility to develop abilities to change and retain stability, supporting dynamics of the firm’s BM in long term. A BM change is preceded by an experimenting and a learning phase, followed by creations, extension, revision and termination of the BM.

Kranz et al. (2016) refer to a company’s ability to incorporate knowledge and information coming from the external environment, being an absorptive capacity, in combination with ambidexterity, both being the important capabilities and enablers of business model change.
Ricciardi et al. (2016) mentions three organisational paradoxes while innovating business model:

- Exploitation and exploration
- Cooperation and competition
- Institutional conformity and agency

3.4. BM dynamics towards sustainability in business-to-business environment

Customers undoubtedly play a crucial role in the business model dynamics. Their preferences and expectations are permanently evolving. Gay (2014) posits, that BMs of smaller firms are closely interlinked with BMs of the bigger firms, with whom they partner. Osterwalder and Pigneur (2010) admitted customers’ irreplaceable role in forming firms’ BMs. Stott et al. (2016) claim a lack of sufficient attention of the focal firms to the partners or channels in their BMs. At the same time, they emphasize the level of the “lock-in” effect in the B2B environment, where BMs of the partners are interlinked. In their view, the level of dependency of the suppliers and customers is sufficient to make each partner adapt its current BM toward a better fit. They suggest a continuous alignment of all partners in the B2B ecosystem is important.

In a competitive environment of developed economies and market structures, the firm’s BM has to be dynamic. No matter whether the firm is active in B2B, business-to-consumer or business-to-government. Without dynamics, without the ability to adapt and change continuously, the existing business model will be copied and improved by a competitor. Another company will likely find a way how to make the product or offer the service faster, better, more efficient, cheaper. Accordingly, BM dynamics are essential contributors to a firm’s sustainability, being its ability to create and deliver value to its stakeholders.

The ecosystem is changing and so must the BMs. Either these of the existing, incumbent firms, or these of the new entrants. As long as one of the important sustainability premises for business model sustainability is its uneasy replicability, we posit, following Teece (2017), that dynamic capabilities are an essential sustainability premise. Different to many other components of the BMs, the dynamic capabilities are hardly replicable (Teece, 2017).

Why is BM dynamics in B2B environment so different to B2C? Typically, the B2B environment is characterised by lower number of customers. There might be a dozen, few hundreds, possibly thousands. Regardless of their number, a company typically tends to know all of them. They interact with the firm. They possess a significant buyer’s power. They purchase products, they ask questions, they give fast and direct feedback. They do or at least they are able to participate in the firms’ product development. However, quite frequently, they might be stubborn in their expectations. This can be attributed to the fact, that they themselves are part of a longer supply chain. Accordingly, they might feel a fear of change.

Typically, a B2C company offers a product suitable for the end user. However, the company will most likely not know all of its customers. Frequently, there are thousands, hundreds of thousands or even more a firm does business with. They might or might not originate from the same culture or maybe not. Their needs and expectations are different. Possibly, only few of them are going to interact directly with the company. Accordingly, getting statistically significant feedback on their real needs is different to the B2B environment.
4. Discussion and Conclusion

The BM topic remains further in the focus of both scholars and practitioners. Despite the enormous number of scholarly articles published, the research area of BM dynamics particularly in B2B field remains underdeveloped and fragmented.

B2B companies are logically part of a wider network. They do not exist in a vacuum; their business models are impacted by the forces in the ecosystem. Diverging from the B2C or even B2G, B2B companies typically have a very specific, firm role in the existing network. A change in their business model might and probably will lead to a change in their role in the network. The modified BM might not be accepted by other players in the supply and external value chain.

B2B partners, whose customers are also B2B suppliers, might face a particular challenge: the longer the supply chain, the higher the challenge. This is caused by the fact, that innovations might not always be seen as beneficial by their direct or indirect recipients. A B2B player, introducing a new supplier of a key component, through a new delivery channel, might face a strong opposition from their customer, who might be reluctant to the change.

The change inside one of the BM’s building blocks or even the change of the building block itself might bring about change in the characteristics of the product or service provided. If we assume that the product is part of the building block of the BMs of a downstream participant. Then, it potentially impacts the supply chain downstream product performance, with possibly unpredictable consequences. Accordingly, the downstream product users will be particularly concerned about any possible, yet unpredictable, impact. The lower the value of the concerned product or service in the final product, the higher the resistance.

Therefore, we posit that the BM dynamics in the B2B environment of the companies intending to stay in their specific industry are significantly different from the dynamics of the B2C companies. Particularly in the medium to large multinational corporations, driving a change is a challenge. It is very often a difficult task to find the person able to advocate the change. It is much easier to find many people who will be opposing or even inhibiting the change. Often for irrational, tacit, subjective reasons, which are very hard to understand, analyse or find proper arguments against.

Accordingly, a B2B company will supposedly face much stronger opposition to its desired BM change than a B2C or B2G firm. Needless to say, B2G companies might face similar resistance stemming from their customers as do the B2B companies. However, the resistance is probably of a different nature – particularly an administrative one.

Therefore, as long as a focal firm intends to “stay in the business”, a BM innovation through dynamics in small, incremental steps, is much more likely in the B2B environment, rather than a radical, revolutionary BM innovation. A company, whose business model changes more abruptly or radically, might be intentionally aiming for a significant change its role in the supply chain. It might be forced out of its current supply chain due to refusal of its partners to accept its new role. It might also gain a new role in a different supply chain within the same or very similar industry.

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