Business Model Innovation and Selection of Entry Barriers

Adam DEWITTE
IAE Lille, LEM-CNRS (UMR 9221)

Résumé :

The concept of business model innovation has lead to numerous research in strategy. However, little attention has been given on topics related to entry strategies. Consequently, this theoretical paper aims to link two research streams, i.e. the literature on business model and that of entry strategy, to provide insightful knowledge for both fields. In particular we try to better understand the role of business model innovation on entry barrier' effectiveness. Using previous theoretical works and empirical examples, we first discuss the ability of an innovative business model (1) to lower entry barriers and (2) to provide first mover advantages for a new entrant. These advantages may lead to new entry or mobility barriers development. We finally identify four research propositions to guide future empirical research.

Mots-clés : Business Model, Business Model Innovation, Entry Strategy, Entry Barriers, Strategic Management.

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INTRODUCTION

The concept of business model (BM) innovation has lead to numerous research in strategy. Scholars employ it for discussing various issues of the field: e.g. open innovation (Chesbrough, 2006), sustainability-driven innovation (Kiron et al., 2012), digitalization (Weill and Woerner, 2013), disruptive innovation (Markides and Oyon, 2010), etc.

However, little attention has been paid on topics related to industry evolution, such as entry strategies, ease of entry, new market development or raise of entry barriers. Incidentally, recent works foster scholars to incorporate the BM approach into the entry strategy literature (Fosfuri et al., 2013; Markides and Sosa, 2013). To better understand the bond between BM and entry strategy, we focus this present research on determining the role played by the business model of an entry candidate on entry barriers, when entering an industry. After a quick delve on entry barriers literature, we discuss theoretical works on business model innovation and empirical examples to develop four propositions to orient future research in the field.

1. FROM ENTRY BARRIERS TO BUSINESS MODEL

According to SCP paradigm (Mason, 1939, 1949), firms' entry and performance depend generally on industry structure. Joe Bain's work (1956) established barriers to entry as a relevant concept for research in firms' entry strategies in a given industry. Furthermore, entry (and exit) ability is essential for industry structure and firms performance. This entry ability would not belong to firms but to industry characteristics that restrain more or less penetration to entrants, depending on whether they are efficient enough compared to incumbents.

However, although industry is a central level of analysis for studying entry strategy (see Bain's or Demsetz's works), it does not explain systematic differences among firms (e.g., see Martin, 1983; Mueller, 1986; Cotterill, 1986). For instance, the specificity of a firm may explain more its profitability (e.g., see Scott and Pascoe, 1986) than structural conditions.

Moreover, Lev (1983) emphasizes a correlation between incumbents' size and entry barriers but without connection with profitability and therefore, with an ability to penetrate and stay in an industry. Among nine industries with "very high" barriers to entry identified by Bain (1956) and Mann (1966), substantial entries happened in four of them (Harris, 1976). As a consequence, structural entry barriers do not seem to presage entry occurrence (Schmalensee, 1989).

Finally, firm profits are more linked to its own relative efficiency than to its industry structure[1]. The conclusions of Carlton and Perloff (2004) are unequivocal[2]: entry barriers do not increase incumbents' profits, and industry structure and entry barriers have no impact on firms' performance. Therefore, we must seek into firms to explain firms' performance and ability to entry.

After highlighting the limitations of using a macro-level (*i.e.* industries) to analyze firms' mobility, we believe that conducting research through a more micro-level is the next step toward the understanding of firms' entry conditions. Hereafter, we advance propositions inviting to orient future research on entry barriers at the firm level. Particularly, we suggest organizations can partly select their environment –and therefore the barriers[3] they face- according to the business model they adopt.

2. ENTER AN INDUSTRY WITH A TRADITIONAL/DOMINANT BUSINESS MODEL

According to industrial organization, firms' entry and performance depend generally on industry structure. Although they *"are likely to differ systematically in traits other than size"*

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[1] See Smirlock *et al.*, 1984; Kwoka and Ravenscraft, 1985.
[2] For previous works, see also Salinger, 1984.
[3] Mobility barriers « *rest on the same structural features as barriers to entry into any group from outside the industry* » (Caves and Porter, 1977, p.250). Therefore, we use the term "entry barriers" hereafter to analyze the limitations of both barriers to entry and mobility barriers

(Caves and Porter, 1977, p.250), underlying basic assumptions of IO theory rest on homogeneous firms, "*identical in all economically important respects except their size*" (Caves and Porter, 1977, p.250). In other words, as it has been shown by Lecocq and Demil (2006) in the game industry, firms are facing homogeneous entry barriers only if they adopt the same business model. Thus, adopting the dominant business model when entering in an industry means facing all entry barriers and every advantage developed by incumbents.

That is why entry failures are common in every stages of the industry life-cycle (e.g., see Dunne *et al.*, 1989; Geroski, 1995). It is the revolving-door phenomenon (Audretsch, 1995). However, many stories of firms entering in industries with high entry barriers and reaching success jeopardize this approach. Many firms with an exponential growth in mature industries are behind a new business model that challenge the dominant model (Hamel and Prahalad, 1994 ; Baden-Füller and Stopford, 1994) by creating value to the customer or by adopting an efficient organization (and doing so capturing value). For example, we can here refer to IKEA, Swatch, Southwest Airlines or Starbuck's.

Thus, an innovative business model may be crafted to avoid or limit entry barriers. We may advocate that in order to enter in an industry with high entry barriers, potential entrants may rely on business model innovation. We therefore formulate the following proposition :

Proposition 1: New entrants that would face high entry barriers induced by the adoption of the dominant business model within the industry are likely to innovate in terms of business model.

3. BYPASSING ENTRY BARRIERS WITH AN INNOVATIVE BUSINESS MODEL

Innovation, and particularly BM innovation, is at the root of firms' new path of growth (Amit and Zott, 2012). BM innovation stems from the strategic creativity of firms. It has spread among numerous industries due to technological shifts and the development of new possibilities induced by e-businesses (Teece, 2010).

To enter an industry, a potential entrant must come with a key advantage (Markides and Sosa, 2013) that does not challenge incumbents on their lands (Porter, 1985). Yet, winning the market is the underlying product of an innovative BM (Markides and Geroski, 2005). If it is efficient enough, an innovative BM used by an entry candidate will determine its profitability (Teece, 2010).

Besides, an innovative business model allows the entrant to overcome incumbents' advantages (Markides and Sosa, 2013). Furthermore, entry barriers of an industry do not apply to all new entrants consistently. Firms seem able to penetrate industries more or less easily according to the business model they adopt (Lecocq and Demil, 2006). Previous research demonstrates that an innovative BM may even allow new entrants to penetrate a mature industry, despite its various entry barriers (Lehmann-Ortega and Moingeon, 2010).

An illustration of this approach may be found in the case of the French telecommunication industry. Traditionally in the French telecommunication industry, an actor needs a license from the state to operate. Since 2003, MVNOs (Mobile Virtual Network Operators) have begun to operate. These organizations do not possess infrastructures. They present more or less a retail business model characterized by wholesale buying from licensed operators in order to sell to customers with margin. This particular business model enables MVNOs to entry the telecommunication industry without supporting regulatory obstacles (obtaining a license from the state) and capital requirements from network infrastructures acquisitions that traditional operators had to face. Most of the MVNOs have mentioned they have chosen this model in order to decrease their cost of entry and limit the investment to operate in the industry. This kind of strategy is congruent with Demil *et al.* (2013) who mentioned that firms may "select" their environment through the choice of their business model.

This leads us to suggest that new entrants who innovate in terms of business model are likely to create a business model that reduces their entry costs in the industry compared to the dominant business model(s). Therefore, we formulate a second proposition :

Proposition 2: An innovative business model may reduce/lower entry barriers, granting the entry candidate an easy entry compare to previous entry candidates (i.e. candidates using a traditional business model to enter the industry).

4. CREATING NEW ENTRY BARRIERS WITH AN INNOVATIVE BUSINESS MODEL

In the previous section, we state that - according to its business model - each firm will face some of the barriers identified and will avoid the others. They may eventually face new entry barriers that were not supported by entrants adopting the dominant business model in the industry. Thus, firms can largely select the barriers they want to face by choosing the business model that best fit with their entry strategy. Thus, every business model can be associated with a corresponding pool of barriers. In our view, entry (and mobility) barriers then become specific to a business model rather than protecting all firms in the industry equally. Therefore, business model is becoming more and more the explanatory variable that best explains the ability to penetrate and stay in an industry in a profitable manner.

Additionally, an innovative business model, i.e. a business model which is new in the industry (Spieth *et al*., 2014), can overcome incumbents advantages. For instance, Markides and Sosa (2013) support that “the business models that pioneers or late entrants adopt could have a big impact on the usefulness and sustainability of first-mover advantages” (p. 326). Therefore, an entry candidate could undermine strategic barriers to entry intentionally created by incumbents (Smiley, 1988).

Sometimes, the BM innovation of the entry candidate is so radical, that its entry may disrupt the industry (Christensen, 1997). Disruptive innovation can be found in a wide range of innovations (e.g. technological innovations, product innovations), including innovative BM (Christensen and Raynor, 2003). These innovations are disruptive to the incumbents and pose challenges for established firms.

First, to be disruptive, an innovative business model must modify substantially the value chain of the industry or the mechanisms of value capture and value creation (Markides, 2006, Lehmann-Ortega and Moingeon, 2010). In that case, the BM adopted by the entrant has the potential to erode the sustainability of incumbents’ early mover advantages (Markides and Sosa, 2013). Therefore, we argue that the new entrant avoids the existing entry barriers of the industry.

Well-known and successful disruptive BM have already changed the “rules of the game” in various industries (Markides, 1997; Govindarajan et Trimble, 2001). By doing so, an innovative BM may lead to an easier entry into the industry, by endogenizing entry barriers (Leocoq and Demil, 2006).

Entry candidates using such a BM can be compared to pioneers of the new markets they create within the industry (Markides and Sosa, 2013). Thus, they develop themselves first mover advantages that will potentially lead to competitive advantages.

The sustainability of its advantages depends on whether or not the position of the new entrant allows him to develop isolating mechanisms (Rumelt, 1987), and also on whether or not its BM can be non-imitable by competitors (Teece, 2010). Consequently, the innovative BM provides a sustainable competitive advantage for the new entrant (Teece, 2010), meaning that it creates new entry barriers for competitors both from outside and inside the industry.

As an illustration, we can mention the case of *Airbnb,* which is among the top ten firms of the industry according to the number of rooms proposed (one million offers in 190 countries in 2015). The company does not possess the traditional assets needed to succeed in the hotel industry (hotels, hotel rooms, well-established brands, etc.). Its business model is quite simple: connecting people who want to rent their housing to people seeking a room. Meanwhile, the firm debits commissions to both the owner and the user of the room. Here, the founders of the company have crafted an innovative business model to increase their performance in an industry where entry barriers are supposed to be very high. Paradoxically, resources at the root of *Airbnb* provided by its multisided platform BM cannot be acquired by the traditional incumbents (i.e. hotel chains). Indeed, previous incumbents are not able to offer their customers the rental properties from private owners. Because *Airbnb*'s disrupting BM extend the hotel industry by adding private accommodations to the value proposition made to customers, and because its BM cannot be imitate by traditional competitors (and by future entry candidates that have already lost the race for improving value to customers with network effects), the firm has raised new entry barriers against its competitors (Teece, 2010; Brokaw, 2014). We suggest that a successful business model, by creating new advantages for the innovative firm creates new barriers for further entrants that want to adopt the same business model. Therefore, it leads us to enounce a third proposition :

Proposition 3 : The creation of an innovative business model by a new entrant leads to the creation of new entry barriers for potential entrants adopting the same business model.

Mobility barriers « *rest on the same structural features as barriers to entry into any group from outside the industry* » (Caves and Porter, 1977, p.250). Consequently, previous incumbents – from strategic groups linked to other markets within the industry - will potentially face the new barriers stemming from the first mover advantages developed by the entrant (Teece, 2010; Markides and Sosa, 2013; Brokaw, 2014). Therefore, we may also extend the previous argument to mobility barriers and formulate the following proposition :

Proposition 4 : The creation of an innovative business model by a new entrant leads to the creation of mobility barriers for incumbents adopting the same business model.

DISCUSSION

In this paper, we attempt to clarify the relationship between the choice of a business model and entry barriers. Our contributions are twofold. First, until then, entry conditions and more generally environment have received little interest from the academic literature on business models. Second, we shed new light on entry barriers and mobility barriers.

Contribution to business model literature

From a concept that first describes the logic of value creation and appropriation by the firm (Chesbrough and Rosenbloom, 2002; Gambardella and McGahan, 2010; Zott and Amit, 2010), business model has became in the last few years an approach that enable a wide range of research about firms (Lambert and Davidson, 2013). The business model presents the features of a research program (in the sense of Lakatos) in strategic management, enabling to reconsider under a new angle traditional problems or concepts of strategy (Lecocq *et al.*, 2010). Moreover, the business model approach takes into consideration the variety of forms of performance in every industry (Baden-Füller and Haefliger, 2013). This paper allows the reintegration of the environment into the analysis in terms of business model. Indeed, for some authors, institutional and environmental shifts should be more integrated in research on firms' trajectories (Govindarajan & Trimble, 2005; Herzlinger, 2006). For instance, in the retail industry, regulatory barriers to entry are a key factor of BM innovation. In France, innovative retail business models are mostly launched so as to bypass these peculiar entry barriers (Dewitte, 2016).

Finally, the main contribution is to conceive of business model of new entrant as a central variable to evaluate entry barriers in an industry. The choice of a business model is also the choice of the entry barriers the firm will face. While some research insists on the ability of business model to change an industry (for instance, Teece, 2010) our argument is different: business model selects entry barriers. As a consequence, the nature and level of entry barriers vary according the business model.

Contributions on entry barriers literature

The 'entry barriers' concept has generated a classic and important literature in strategic management. From a structural approach (e.g., see Joe Bain's structural entry conditions) to a more strategic approach (we here refer to strategic barriers intentionally created by incumbents; e.g., see Smiley, 1988), the reading of the concept has evolved. In this theoretical paper, we try to demonstrate that the understanding on entry barriers must be reconsidered.

In particular, we contribute implicitly to question the existence of barriers at an industry-level (or at an intermediate-level, *i.e*. strategic groups). Indeed we suggest that the entry barriers the firm faces are peculiar to its business model. Hence, only a business model-driven analysis enables to identify these barriers. That makes the business model the right level for analyzing entry (and mobility) barriers. As a consequence, structural dimension and incumbent actions is not sufficient to explain the nature and level of entry barriers supported by a given new entrant. Its business model is also a crucial variable. Moreover, by reinterpreting Caves and Porter's work (1977) on mobility barriers, *"an industry thus may consist of group of firms"* (p.251), each group can be considered to have a different business model. Therefore the arrival of a new business model in an industry implies the creation of new entry (and mobility) barriers. Finally, an indirect consequence of our theoretical assumptions is a reinterpretation of the idea of strategic group.

Contributions on strategic groups literature

Strategic groups' qualification sometimes underlies a cognitive approach that emphasizes the importance of managerial cognitive representations (Tripsas and Gavetti, 2000). The competitors have their own interpretation of the environment and the groups they belong to (Peteraf and Shanley, 1997). Responding to the definition of Porter *("firms in the same strategic group generally resemble one another closely in many ways besides their broad strategies"*, 1980, p.130), and Hunt ("*a group of firms within the industry that are highly symmetric [...] with respect to cost structures, degree of product differentiation, degree of vertical integration, and the degree of product diversification"*, 1972, pp.8-16), we here argue that a strategic group is composed of firms that present a similar business model, i.e. that have faced face the same type of entry (and mobility) barriers.

<u>Contribution on entry strategy literature</u>

Our paper points out a promising area for future investigation, which is novel for the entry strategy literature. Indeed, the business model approach should formally be incorporated into entry strategy literature to develop a more nuanced understanding of the field (Fosfuri, Lanzolla and Suarez, 2013). For instance, Markides and Sosa (2013) argue that by accounting for pioneers and later entrants' business models, entry strategy literature (and in particular first mover advantages literature) should improve its predictive power. Finally, using an innovative BM tends to be an important driver of entry success (Porter, 1985; Shankar et al., 1998; Markides and Geroski, 2005).

Future research

This theoretical paper and its research propositions come from the analysis of the theory on entry barriers and business model. Future research will be conducted so as to empirically test the propositions.

REFERENCES

Amit, R.: C. Zott (2012), Creating value through business model innovation, *MIT Sloan Management Review*, Spring 2012.

Audretsch, D. B. (1995), *Innovation and Industry Evolution*, Cambridge: MIT Press.

Baden-Fuller, C., R. Stopford (1994), *Rejuvenating the mature business: the competitive challenge*, London : Routledge.

Baden-Fuller, C., S. Haefliger (2013), Business Models and Technological Innovation, *Long Range Planning*, 46: 6, 419-426.

Bain, J. S. (1956), *Barriers to New Competition*, Cambridge: Harvard University Press.

Brokaw, L. (2014), How to win with a multisided platform business model, *MIT Sloan Management Review*, May 2014.

Carlton, D. W.; J. M. Perloff (2004), *Modern Industrial Organization*, 4th edition, Prentice Hall.

Caves, R. E., M. E. Porter (1977), From Entry Barriers to Mobility Barriers: Conjectural Decisions and Contrived Deterrence to New Competition, *Quarterly Journal of Economics*, May, 241-262.

Chesbrough, H., R. S. Rosenbloom (2002), The Role of the Business Model in Capturing Value from Innovation, *Industrial and Corporate Change*, 11 : 3, 529-555.

Chesbrough, H. (2006), *Open business models: How to thrive in the new innovation landscape*, Boston: Harvard Business School Press.

Christensen, C. M. (1997), *The innovator's dilemma: When New Technologies Cause Great Firms to Fail*, Boston: Harvard Business School Press.

Christensen, C. M.; M. Raynor (2003), *The Innovator's Solution: Creating and Sustaining Successful Growth*, Boston: Harvard Business School Press.

Cotterill, R. S. (1986), Market Power in the Retail Food Industry: Evidence from Vermont, *Review of Economics and Statistics*, 68, 379-386.

Demil, B., X. Lecocq, V. Warnier (2013), *Stratégie et Business Models*, Paris : Pearson.

Dewitte, A. (2016), The development of a business model portfolio in a changing legal environment: Pursuing growth in the retail industry, *32nd EGOS Colloquium*, Naples, July 7-9.

Dunne, T., M. Roberts, L. Samuelson (1989), The Growth and Failure of US Manufacturing Plants, *Quarterly Journal of Economics*, 104: 4, 671-698.

Fosfuri, A.; G. Lanzolla; F. Suarez (2013), Introduction to the special issue on entry timing strategies, *Long Range Planning*, 46 : 4-5, 297-299.

Gambardella, A., A. M. McGahan (2010), Business Model Innovation: General Purpose Technologies and their Implications for Industry Architecture, *Long Range Planning*, 43:2/3, 267-271.

Geroski, P. A. (1995), What do We Know About Entry, *International Journal of Industrial Organization*, 13, 421-440.

Govindarajan, V.; C. Trimble (2004), Strategic Innovation and the Science of Learning, *MIT Sloan Management Review*, Winter 2004.

Hamel, G., C. Prahalad (1994), *Competing for the future*, Boston: Harvard Business School Press.

Harris, M. N. (1976), Entry and Barriers to Entry, *Industrial Organization Review*, 4, 165-174.

Kiron, D.; N. Kruschwitz; M. Reeves; EE. Goh (2012), The benefits of sustainability-driven innovation, *MIT Sloan Management Review*, Winter 2013.

Lambert, S. C., R. A. Davidson (2013), Applications of the Business Model in Studies of Enterprise Success, Innovation and Classification, *European Management Journal*, 31:6, 668-681.

Lecocq, X., B. Demil (2006), Strategizing Industry Structure: the case of open systems in a low-tech industry, *Strategic Management Journal*, 27, 891-898.

Lecocq, X., B. Demil, J. Ventura (2010), Business Models as a Research Program In Strategic Management : an Appraisal Based on Lakatos, *M@n@gement*, 13 : 4, 214-225.

Lev, B. (1983), Some Economic Determinants of Time-Series Properties of Earnings, *Journal of Accounting and Economics*, 5, 31-48.

Lehmann-Ortega, L.; B. Moingeon (2010), Creation and implementation of a new business model: a disarming case study, *M@n@gement*, 13: 4, 266-297.

Mann, H. M. (1966), Seller Concentration, Barriers to Entry, and Rates of Return in 30 Industries, *Review of Economics and Statistics*, 48, 296-307.

Markides, C. C. (1997), Strategic Innovation, *MIT Sloan Management Review*, Spring 1997.

Markides, C. C. (2006), Disruptive innovation: in need of better theory, *The Journal of Product Innovation Management*, 23, 19-25.

Markides, C. C.; P. Geroski (2005), *Fast Second: How Smart Companies Bypass Radical Innovation to Enter and Dominate New Markets*, San Francisco: Jossey-Bass.

Markides, C. C.; D. Oyon (2010), What to do against disruptive business models (when and how to play two games at once), *MIT Sloan Management Review*, Summer 2010.

Markides, C. C.; L. Sosa (2013), Pioneering and first mover advantages: the importance of business models, *Long Range Planning*, 46 : 4-5, 325-334.

Martin, S. (1983), *Market, Firm, and Economic Performance: An Empirical Analysis*, New York : New York University, Salomon Brothers Center.

Mason E. S. (1939), Price and Production Policies of Large-Scale Enterprise, *American Economic Review*, 29:1.

Mason E. S. (1949), The Current Status of the Monopoly Problem in the Unites States, *Harvard Law Review*, 62:8, 1265-1285.

Mueller, D. (1986), *Profits in the Long Run*, Cambridge: Cambridge University Press.

Porter, M. E. (1985), *Competitive advantage*, New York: Free Press.

Peteraf, M. and M. Shanley (1997), Getting to Know You: A Theory of Strategic Group Identity, *Strategic Management Journal*, 18 : 1, 165-186.

Rumelt, R. P. (1987), "Theory, strategy, and entrepreneurship", *in* D.J. Teece (Ed.), *The Competitive Challenge: Strategies for Industrial Innovation and Renewal*, Cambridge: Ballinger Publishing, 137-158.

Schmalensee, R. (1989), "Inter-Industry Studies of Structure and Performance", *in* R. Schmalensee and R. Willig *The Handbook of Industrial Organization*, Amsterdam: North Holland.

Scott, J. T., GG. Pascoe (1986), Beyond Firm and Industry Effects on Profitability in Imperfect Markets, *Review of Economics and Statistics*, 68, 284-292.

Shankar, V.; G. Carpenter; L. Krishnamurthi (1998), Late mover advantage: how innovative late entrants outsell pioneers, *Journal of Marketing Research*, 35, 54-70.

Smiley, R. (1988), Empirical Evidence on Strategic Entry Deterrence, *International Journal of Industrial Organization*, 6: 2, 167-180.

Spieth, P., D. Schneckenberg, Ricart, J. E. (2014), Business model innovation – state of the art and future challenges for the field, *R&D Management*, 44, 237–247

Teece, D. J. (2010), Business Models, Business Strategy and Innovation, *Long Range Planning*, 43: 2-3, 172-194.

Tripsas, M., G. Gavetti (2000), Capabilities, Cognition, and Inertia: Evidence from Digital Imaging, *Strategic Management Journal*, 21, 1147-1161.

Weill, P.; S. L. Woerner (2013), Optimizing your digital Business Model, *MIT Sloan Management Review*, Spring 2013.

Zott, C., Amit, R. (2010), Business model design: an Activity System Perspective, *Long Range Planning*, 43:2/3, 216-226.