Transitivity Analysis of 'The Old Building' by Imdad Hussein *A Corpus-Based Study*

David Ramirez

Department of Physical Education and Sport, University of Bilecik Şeyh Edebali, Gülümbe, Bilecik 11230, Turkey

ABSTRACT. We argue that while the business model construct may not be entirely new, it can still provide a novel lens, complementary to Resource Based View and Market Positioning, to develop new theoretical insights in strategy. We propose that the consideration of interdepend- encies among the activities of a business model provides such a lens. We show that by starting strategy development with interdependencies among activities, we can: (1) develop new insights on how to build superior strategies; and (2) explain company performance variance especially when heterogeneity in resources and capabilities is not strong and barriers to imitation are weak. Overall, we propose that a promising research avenue for the business model literature is to inte- grate complexity theory with demand-side and supply side theories of strategy to generate more nuanced insights on what activities to connect and how to develop superior interdependencies among activities that can form the basis of superior strategies.

INTRODUCTION

In the last 15 years, much literature has developed around the concept of the business model. This literature has explored definitions of what is a business model, developed typologies of the most frequently used business models and identified methodologies that firms can use to develop new innovative business models as well as contingencies to compete with dual business models in the

same industry (e.g., Amit and Zott, 2001; Casadesus-Masanell and Ricart, 2010; Chesbrough, 2007; Johnson et al., 2008; Markides, 2008; McGrath, 2010; Spieth et al., 2014; Teece, 2010; Zott and Amit, 2007, 2010). To illustrate the popularity of the business model topic, a search on Google scholar returned more than 4,000 articles on it published in management journals in 2018 alone.

This literature has largely developed as a 'disconnected' body from strategy literature even though both sets share the same goal of explaining variation in firm performance (Casadesus-Masanell and Ricart, 2010; Porter, 2001; Zott et al., 2011). Concerns have recently been raised in the broader strategic management literature that the business model literature is not enriching to it. For example, Teece (2010, p. 192) complained that: 'Like other interdisciplinary topics, business models are frequently mentioned but rarely analyzed; therefore, they are often poorly understood'. He further argued that: 'the concept of business model has no established theoretical grounding in economics or in business studies' (Teece, 2010, p. 174). Similarly, Arend (2013, p. 390) argued that: '… the use of the term "business model" as a "description" of how a traditional venture operates is strong on redundancy and weak on theoretical grounding…'. He further argued that: 'on one (extreme) hand, it could be argued that the idea of the business model has been yet another un-needed, re-labeled, re-interpretation of the profit equation in search of some distinction as a new level of analysis' (Arend, 2013, p. 392). Porter (2001, p. 73) went as far as to argue that the business model concept is: '… an invitation for faulty thinking and self-delusion'.

In their Point paper in this issue, Bigelow and Barney (in press) do not take such an ex- treme view and concede that the business model construct may have some practical use- fulness to managers and entrepreneurs. However, they are pessimistic that it can enrich strategy literature and claim that there are limited opportunities for the business model concept to yield theoretical contributions. They offer three reasons to support their view:

(1) in terms of construct definition, the business model simply rephrases what is already in the extant strategy literature's definitions; (2) we already have theories of strategy execution and the business model does not improve on them; (3) as for the construct's potentially most interesting theoretical aspect – its focus on the activity system – both the Resource-Based View (RBV) and the Market Positioning school have already addressed the importance of activities for a firm's strategy and competitive advantage.

Not surprisingly, this pessimistic assessment of the business model construct is not shared by the community of scholars who have been publishing in this field. For example, Markides (2015, p. 134) noted that: 'Certainly, the business model field is quite young, so it will take time for it to make an impact. But even in its short life to date, theoreti- cal contributions have been made and new insights have emerged'. In a comprehensive survey of the business model literature, Massa et al. (2017) showed that 'three inter- pretations of the meaning and function of "business models" have emerged from the management literature: (1)

business models as attributes of real firms, (2) business models as cognitive/linguistic schemas (e.g., Baden-Fuller and Morgan, 2010 and Baden-Fuller and Mangematin, 2013); and (3) business models as formal conceptual representations of how a business functions'. They proposed that the novelty of business model research as a new field may be due to the fact that the business model perspective is challenging the assumptions of traditional theories of value creation and value capture by focusing contextually on value creation on both the demand side and supply side (rather than just on the supply side as earlier strategy theories had done).

Our own position is that – contrary to what Bigelow and Barney argue – the busi- ness model construct has the potential to enrich strategy literature with practical tools and theoretical insights. However, in contrast to what advocates of the business model construct point out, we argue that the scope for theoretical contributions has not yet been fully exploited in the extant business model literature. In this sense, we believe that academic debate around business models has been somewhat misfocused. The issue is not whether the business model is a brand-new concept or not. As argued by Bigelow and Barney (2020), most of the features of a business model are already contained in existing strategy theories – so trying to position it as a new concept is perhaps futile. However, this does not mean that the construct cannot help us develop new theoretical insights on strategy. We can do this by shifting our attention away from the question of whether the business model construct is different from strategy to focus instead on interdependencies among activities in a business model as a new 'lens' in developing strategy. Looking at strategy from this lens will allow us to develop new insights that will enrich the existing theory of strategy.

In this paper we adopt the prevailing definition of business model as an activity system that is centred on a focal firm and spans its internal/ external boundaries to bridge value creation with value capturing (e.g., Afuah, 2003; Hedman and Kalling, 2003; Markides, 2008; Seddon, et al., 2004; Teece, 2010; Zott and Amit, 2010; Zott et al., 2011). Our thesis is that the feature of the business model construct that has the potential to help us develop new insights is the concept of interdependencies among internal and external activities that link value creation to value capturing. For the purpose of this paper, we say that there is interdependency when two or more activities in a business model depend on each other (e.g., Rivkin and Siggelkow, 2003; Thompson, 1967). We will propose that the lens that the business model construct brings to strategy is the systematic emphasis on interdependencies among the activities of the firm as a novel starting point in strategy development. We propose that this lens is distinctive and complementary to the other schools of strategy – that is, the Positioning school and the RBV.

It is true that the notion of interdependencies is not new: it is present in both the Positioning and the RBV literatures. For example, Porter (1996) introduced the notion of strategy as a system of interrelated activities and emphasized the

notion of ‘fit’ among activities as an important driver of competitive advantage (see also Porter and Siggelkow, 2008; Rivkin, 2000; Rivkin and Siggelkow, 2003; Siggelkow, 2001). In addition, Porter (1996) developed rules to follow when designing the activity system. The system should avoid: (1) inconsistencies in image or reputation; (2) inconsistencies arising from activi- ties themselves; and (3) inconsistencies arising from limits in internal co-ordination and control. Thus, we do not dispute that the notion of interdependencies is present in the Positioning literature. However, this literature has not given it the central and indepen- dent role it deserves. In the Positioning school of thought, the role of an activity system is seen as a necessary translation of a company’s position. In other words, the Positioning view sees activities as a reflection of the strategy choices, not as a novel starting point.

Similarly, the notion of interdependencies is present in the RBV literature as well. For example, Barney et al. (2001) addressed the role of managers’ actions in structuring, bundling, and leveraging firm resources – something that is somewhat related to ex- ploring interdependencies. However, the focus has been on resource management and asset orchestration but not on the overall network of activities that link resources and capabilities. Furthermore, as noted by Zott and Amit (2010), the focus in the RBV has been mostly internal and not on the web of interdependent activities that transcends the focal firm and spans its boundaries, which is a key tenet of the business model construct. The importance of exploring external interdependencies has become particularly im- portant in the digital economy with the emergence of new organizational forms such as digital marketplaces, platforms and ecosystems (e.g., Adner, 2017; Jacobides et al., 2018; Lanzolla and Frankort, 2016).

Thus, even though the notion of interdependencies exists in both the Positioning school and in the RBV theory of the firm, neither of these schools see it as a novel starting point in developing strategy. Instead, they start their analysis with either market/ industry factors or internal resources and treat interdependencies as a by-product of higher-level decisions. We argue that by looking at interdependencies among activities as an independent variable – as opposed to a necessary translation of a firm’s strategy or of ‘orchestration’ of resources and capabilities – and by focusing on the wider internal/ external interdependencies (Adner and Kapoor, 2010; Jacobides et al., 2018), we can both complement the extant theories of competitive advantage and develop new theoretical insights. For example, we will show that a business model approach can explain company performance variance especially when heterogeneity in resources and capabilities is not strong and barriers to imitation are weak. We explain our position below.

TOWARDS A BUSINESS MODEL VIEW OF STRATEGY: THE KEY ROLE OF INTERDEPENDENCIES IN BUILDING COMPETITIVE ADVANTAGE

In order to build a persuasive case for considering the interdependencies among activities – and by extension the business model construct itself – as an independent variable on which to build the strategy of a firm, we should identify the ex-ante mechanisms through which a business model can determine competitive advantage. In other words, we should be able to identify what makes a system of interdependent activities superior to another one, all else being equal. We propose that a business model excels if it is built on interde- pendencies among value creating and value capturing activities that share certain char- acteristics (as defined below). This implies that a key element of strategy development should be to make strategic choices about superior interdependent activities.

To appreciate this point, let us first start with the obvious consideration that a firm has the choice within a number of possible business models. Consider, for instance, a strat- egy that can be translated into a business model made up of, say, three interconnected activities: A, B, and C. In this illustration, A is the choice of customers to target; B is the choice of products; and C is the choice of distribution channel. In addition, assume that each activity has three possible levels or answers – for example, for activity C, we can distribute our product through retailers; or through the Internet; or through a direct sales force. Given this simplified model of only three activities and three levels for each activity, we can come up with 27 possible combinations of activities (that is, 27 possible business models) – for example, A1B1C1, A1B1C2, A1B1C3, A1B2C1, and so on. The point is that we can potentially have 27 different business models when we assume that the firm's business model has only three activities and each activity can have three differ- ent levels. In reality, a business model will consist of many more than three activities and each activity may have more than three possible levels. This is increasingly true due to the diffusion of digital technologies that have created many more viable possibilities for each activity (e.g., Lanzolla and Suarez, 2012; Teece, 2010).

If we assume that a business model can have more than three activities and each activity can have more than three levels, then by implication the possible combinations of activities (i.e., the number of business models) is large. Given the choice of so many possible models, which system of interdependent activities is more likely to offer the firm competitive advantage? We will break down this question into two further questions: What activities to connect to build 'superior' interdependencies? and How to connect them to build 'superior' interdependencies?

What Activities to Connect to Build 'SUPERIOR' Interdependencies?

What activities should be connected is of paramount importance for firm performance and this is a concern that the business model literature shares with the strategy literature (see also Bigelow and Barney, 2020). Unfortunately, neither literature provides a theoret- ically rigorous way to make this decision.

The business model literature is particularly guilty of this. Without giving any theoret- ical reasons for their choices, different academics have proposed different activities that should make up a business model. For example, Osterwalder and Pigneur (2010) identi- fied nine elements that should be put together to construct a business model. By contrast, Slywotzky proposed 11 elements, Hambrick and Fredrickson (2005) argued for five and Markides (2008) proposed three – Who are the customers that we should target? What shall we offer these customers? How (i.e., what value chain activities) should we deliver value to these customers? Zott and Amit (2010) proposed that the elements that should be connected are 'content, structure and governance that describe an activity system's architecture', but similarly offered no theoretical justification for this.

The strategy literature has generally refrained from giving much guidance on the issue other than proposing that the activities should be a by-product of the firm's market positioning or should build on the VRIO resources. For instance, according to the po- sitioning literature, the important thing is to choose activities that fit together well and collectively provide the firm external (i.e., market) fit as well. The implication of this is that the firm starts its analysis with the market, decides what position in this market to take and then, translates this position into the activities of its business model. While logical, this view fails to appreciate that the same market position can be translated into several possible systems of activities (that is, business models). This suggests that we need further guidance in order to choose from a multitude of viable activities that can serve a market position equally well.

How to Build Superior Interdependencies among Activities

We believe that the area where the business model literature can make stronger theoreti- cal contributions to the strategy literature is on the investigation of how to build superior interdependencies among the selected activities. We propose that the business model literature can help us answer the question of how to build superior interdependencies among activities by acting as an integration platform of a number of literature streams from different disciplines. Figure 1 summarizes our discussion below.

Strategy literature has already contributed some ideas on how we could develop su- perior interdependencies among activities. For example, Siggelkow and Levinthal (2003) argued that 'to create a competitive advantage, firms need to find activity configurations that are not only internally consistent, but also

appropriate given the firm's current en- vironment'. As an illustration of this point, this literature has proposed that as long as interactions among a firm's activities are pervasive, then 'temporary decentralization' – which is an organizational structure distinct from centralization and decentralization – can yield the highest long-term performance for a firm (Siggelkow and Levinthal, 2003). Similarly, Aggarwal and Siggelkow (2011) showed that for higher levels of interdepen- dence, co-ordination can become more critical for firm performance than exploration – for example, exploration can be ineffective in alliance settings unless it is tied to co- ordination. Overall, Siggelkow (2011) has proposed that superior interdependencies are the ones that (1) provide tight fit among activities; (2) connect many current or future organizational activities; (3) act as central nodes in the system; (4) are resilient to change; and (5) provide strong external fit (as opposed to exclusively internal fit) which allows the firm to respond quickly to environmental changes.

There is no question, therefore, that the existing strategy literature has already ex- plored the issue of developing superior interdependencies. In addition, it has recognized the potential for systematically integrating insights from Complexity theory (e.g., Albert et al., 2015; Porter and Siggelkow, 2008). Importing insights from Complexity theory into strategy can be a value-creating exercise because Complexity theory starts from the assumption that the same goal can be achieved through different means or configurations (Bell et al., 2014; Ofordi-Dankwak and Julian, 2001; Tsoukas, 2017). In other words, Complexity theory stresses the concept of equi-finality – as opposed to uni-finality – which refers to a situation where 'a system can reach the same final state, from different initial conditions and by a variety of different paths' (Katz and Kahn, 1978, p. 30; see also Galunic and Eisenhardt, 1994; Gresov and Drazin, 1997). For example, Kauffman (1993), Levinthal (1997), and Rivkin (2000) showed that the mapping of all possible sets of a firm's choices on to performance values (such as a profitability measure) will allow us to identify theoretically that not all interactions among activities have the same per- formance implications. As such, Complexity theory provides theoretical arguments and empirical evidence that interdependencies matter, and when and how they matter (e.g., Siggelkow, 2002a; Siggelkow and Levinthal, 2003).

Despite recognizing the need to do so, the strategy field has not made much progress in systematically integrating insights from Complexity theory into our understanding of the antecedents of firm performance (Porter and Siggelkow, 2008). Porter and Siggelkow (2008, p. 35) put it bluntly: 'while interdependencies among a firm's activities are wide- spread, the Strategy field has struggled for many years to find a structured way to analyze the consequences of such interactions'. We believe that this may be because strategy fo- cuses on the 'high-level' choices that the firm needs to make which often are too abstract to make the links with Complexity theory apparent (Ofordi-Dankwa and Julian, 2001; Tsoukas, 2017). By contrast, the business model construct – because of its

granularity and its focus on bridging value creation and value capturing activities – can provide a more holistic platform to integrate insights from different management disciplines and develop a less descriptive and more dynamic set of ideas on how to design a superior system of interconnected activities, all else being equal. Specifically, we believe that business model research should integrate three research streams: complexity theory, demand side theories of strategy and supply side theories of strategy.

An application: The 3Cs test for conflicts with the competitors' business models. Our proposal is that the business model literature should leverage the mechanisms identified in complexity theory and contextualize them within the domain of demand-side and supply side theories of strategy to develop a more integrative view of the sources of superior interdependencies. In this paper, we show that we can develop insights on how to explain competitive advantage even in the extreme – and paradoxical – case where we cannot build a superior set of interdependent choices by leveraging a core implication of complexity theory – that is, the construct of 'conflicts' between activities (e.g., Porter and Siggelkow, 2008; Siggelkow, 2002b) – and by linking it to supply side theories of strategy (e.g., Barney, 1986; Dierickx and Cool, 1989; Peteraf, 1993; Porter, 1979).

To illustrate our insights, consider a company B that introduces a new business model – say b – in an established industry. The new business model 'b' proves successful and companies in the market aspire to imitate it. Let's also assume that imitation is easy – for example, company B has not patents to protect its business model – and so an incum- bent firm – say A – quickly imitates and adopts this business model. Despite the fact that the new business model was quickly and easily imitated, it can still provide the original company B that introduced it a competitive advantage over A. We argue that there are at least three reasons for this.

First, there are situations where the new business model will cannibalize (e.g., Chandy and Tellis, 1998; Velu and Stiles, 2013) firm A's legacy business model – we will call this the cannibalization conflict. Thus, adopting the new business model will create prob- lems for A that the company that introduced the new business model (B) does not face. These problems will persist even when A adopts the new business model in a separate unit, away from the legacy business. For example, Nestlé created a separate unit to de- velop Nespresso but that did not stop Nespresso from cannibalizing Nescafé's market. Similarly, Medtronic created a separate unit to develop Nayamed but this did not stop Nayamed from undermining the sales reps (i.e., the distributors) of Medtronic. Managers at company A will always resist the adoption of a new business model that undermines their core market. All this implies that ease of imitation is not the issue – the presence of conflicts will make adoption of the new business model problematic for the imitating firm (A).

Second, the value chain activities of the new business model might be incompatible (e.g., Christensen and Raynor, 2003; Porter, 1996; Porter and

Siggelkow, 2008) with those of other business units in company A – we will call this the compatibility conflict. This means that by trying to execute the new business model, firm A will undermine the activities of other units in its portfolio. For example, if Unilever moves aggressively into private label in a specific market category, it might risk damaging its existing brands and diluting its strong culture for innovation and differentiation. Similarly, IKEA can set up another company, call it a different name, and make it a full-service shop. There is no reason why IKEA cannot manage two separate businesses like that (after all, diversified firms have been successful in managing more than two businesses). But doing so might damage its brand, identity and image in the eyes of customers. The important point is that this conflict would persist even if A were to create a separate unit for the new busi- ness model – separation may reduce a conflict but it does not eliminate it.

Third, the two conflicts mentioned can exist simultaneously thus strengthening even more the advantage of B. The new element here is not that the business model is pro- tected by heterogenous resources or barriers to imitation or even by superior intercon- nected activities. Business model 'b' can be easily imitated but incumbents might struggle to imitate it because of conflicts with their existing business models, and these conflicts will persist even if you separate the new business model from the legacy business.

In sum, we are suggesting a new test for competitive advantage centred on the business model construct. Specifically, if an incumbent (A) tries to imitate the business model (b) that a new competitor (B) introduces:

- Will the imitation of B's new business model create cannibalization conflicts for the incumbent competitor A?
- Will the imitation of B's business model create compatibility conflicts for the incumbent competitor A?
- Will the imitation of B's business model create cannibalization and compatibility conflicts for the incum- bent competitor A?

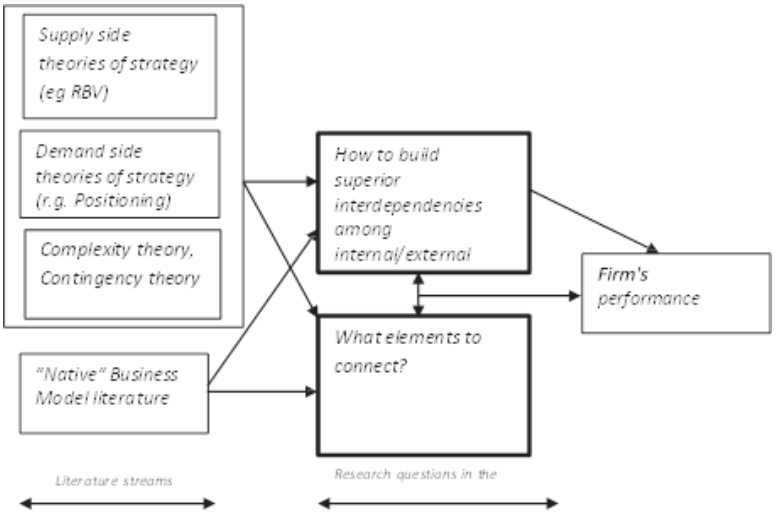

Figure 1. A research agenda to improve the predictive power of the Business model and Strategy literatures

If the answers to these questions is yes, business model (b) is likely to provide firm B with a competitive advantage on firm A. We shall call these questions, the test for con- flicts with your competitors' business model or the 3Cs test.

Over and above the existence of different types of conflicts, we can also have different degrees of conflicts (i.e., minor versus major). By extension, our test for conflicts suggests that if a company adopts a business model that triggers many and major conflicts with the business models of its competitors when they try to imitate it, then it will have a compet- itive advantage. This argument, in turn, implies that a firm could build its competitive advantage by designing a business model that conflicts in a major way with the business models of competitors. The more conflicts there are, and the bigger they are, the bigger the compet- itive advantage to the firm. Note that we are not speaking about resources or barriers to imitation. We are focusing on activities – or a subset of activities – that cannot be imi- tated by competitors without triggering the types of conflicts described in the 3Cs test.

This has important implications for how firms ought to engage in the development of their strategies. A key question in any strategy development workshop should be: 'Can I design the activities of my strategy in ways that conflict with the activities of my compet- itors' strategies?'. This argument could be extended to other fields of strategy. For exam- ple, the importance of developing business models with an eye on what competitors are doing can be seen in the literature on first-mover advantages (FMA) (e.g., Lieberman and Montgomery, 1988; Suarez and Lanzolla, 2007). Despite the strong theoretical arguments supporting the existence of FMAs and the numerous papers exploring the conditions under which pioneering is a superior strategy, the empirical evidence is mixed. As already shown by Vanderwerf and Mahon (1997), a possible reason for the conflicting empirical results may be the methodology used to study FMAs. But as argued here and by Markides and Sosa (2013), another possible reason may be the fact that past studies failed to explicitly control for the business models used by both the pioneer and the late entrants. Failure to do so will produce a biased estimate of the correlation between performance and FMAs.

TOWARDS A BUSINESS MODEL VIEW OF STRATEGY: WHEN BUSINESS MODEL MATTERS MORE FOR PERFORMANCE

Having established above that interdependencies among valuable activities – that is, a business model approach to strategy – can provide companies with a competitive advan- tage, we will now show when the business model matters more for firm performance. To date, the Strategy field had traditionally emphasized elements – for example, entry bar- riers, rivalry and mobility barriers – in the industry structure as sources of competitive advantage (Porter, 1985). According to this view – known as the Positioning School – a company might enjoy superior performance when it was positioned in attractive indus- tries that

were protected by high barriers to entry and imitation. With the emergence of the resource-based view of the firm (RBV), resources took centre stage as elements that can help a firm achieve competitive advantage – especially resources that are valu- able, rare and difficult to imitate, replicate or substitute (Barney, 1997; Barney, 2001; Wernerfelt, 1984). In other words, according to the RBV, companies might enjoy supe- rior performance when they possess valuable and idiosyncratic – or VRIO (Barney, 1997) – resources and capabilities. We summarize these two schools of thought in Table I. The vertical axis represents the RBV and measures the heterogeneity of resources from low to high. The horizontal axis represents the Positioning school and measures the strength of barriers to imitation from low to high. The Positioning school can explain performance variance especially well in quadrants 2 and 3. By contrast, RBV can explain perfor- mance variance especially well in quadrants 3 and 4.

Unfortunately, the extant strategy theories do not seem to extend their ex ante explan- atory power to cases where resources and capabilities are not idiosyncratic and barriers to entry and imitation are low (quadrant 1 in Table I). The case depicted in quadrant 1 is not an outlier. Consider, for example, two retailers such as Zara and H&M. Both Zara and H&M have the same market 'position', which we can broadly describe as 'fast fashion'. Furthermore, resources and capabilities such as labour, location and IT systems in the 'fast-fashion' industry are widely available. Yet, the performance of Zara is signifi- cantly different from that of H&M. How is it possible that two companies with the same position and which have access to fairly homogenous resources and capabilities can ex- perience such different competitive performances? Alternatively, consider Canon's entry into the copier market in the 1960s. Xerox had been a pioneer in this market but a num- ber of firms, including IBM, Kodak and Canon followed it. All these firms adopted the same strategy – that of the second mover – but only Canon was successful. Again, why is this the case? Above we have explained theoretically that a business model approach to strategy might help answer these questions.

Our conceptual insights are also corroborated by emerging management research which suggests that the difference in performance in these examples can be traced to the different business models that were employed to execute the chosen strategies (e.g., Markides and Sosa, 2013). For example, whereas Zara adopted a fully vertically inte- grated business model, H&M relies on outsourcing and third parties (e.g., Markides, 1997; Zott and Amit, 2010). Similarly, IBM and Kodak imitated the main elements of Xerox's successful business model by targeting big corporations as customers; selling their machines on the value proposition of speed of copying; and using their direct sales forces to reach customers. By contrast, Canon adopted a different activity system (that is, business model): it targeted small and medium-sized enterprises, sold its machines on the value proposition of cost and quality and distributed its products through its existing dealer network. In both cases, Zara and Canon put the design

of their business model at the core of their strategy (e.g., Markides, 1997; Markides and Geroski, 2005; Porter, 1985; Shankar et al., 1998).

The empirical evidence that there is variance in the performance of firms in quadrant 1 and that this variance can be explained by the choice of business model is not restricted to case studies. The extant empirical literature has developed increasing evidence that the business model matters, especially where industry structure does not offer protection from imitation and resources and capabilities are widely available and/or easily imitated. In these situations, companies can use a distinct business model for competitive differen- tiation. For example, this is the case in the retail industry. Sohl et al. (2018) studied this industry with variance decomposition analysis using panel data on 917 businesses in the European retail sector over a 12-year period (2005–16). They found that the business model concept can explain a significant amount of variance in ROA (5.1 per cent) and market share (7.9 per cent), making it comparable in importance to industry effects.

Overall, we argue that the choice of business model seems to matter more for perfor- mance, especially when barriers to imitation and heterogeneity in resources and capa- bilities are low. Table I shows a possible taxonomy of the prevailing lenses that might be used when developing strategy.

CONCLUSION

Our basic thesis is that a focus on the interdependencies in a firm's activity system (that is, its business model) as a complementary, yet separate lens in the strategy field can enhance our understanding of the relationship between strategy and performance.

First, we have argued that by integrating insights from contingency theory and com- plexity theory with demand side and supply side theories of strategy, business model lit- erature can develop new theories on the ex-ante mechanisms through which companies can design superior interdependencies, all else being equal. By virtue of being a more granular concept than strategy, the business model construct can enable the develop- ments of insights more easily and more effectively than the strategy literature ever did. Our Figure 1 shows a potential roadmap for additional research on business models.

Second, building on our main claim, we have shown that by focusing on 'conflicts' as a potential source of competitive advantage, the business model literature can develop new drivers of competitive advantage. We have identified a test – the 3Cs test – to illustrate our point.

Third, we have shown that a focus on interdependencies among activities – that is, a business model approach to strategy – matters in explaining firm performance, es- pecially when heterogeneity in resources and capabilities is not strong and barriers to imitation are weak. Our framework shown in Table I has the potential to move us a step closer to understanding the drivers of firm

performance under different contingencies thus providing a lens that can complement the other approaches to strategy – for exam- ple, Bigelow and Barney, 2020 – and the broader insights of the Positioning school of thought and the Resource-Based view.

Overall, we believe that continuing to debate whether there is a difference between strategy and business model will add little value to the strategy literature. Even if we accept that the business model is not different from strategy, it does bring a different lens at examining competitive advantage, one that has at its heart the construct of interde- pendencies among value chain activities. Simply adopting a different lens is enough to provide us with new insights. But the construct of interdependencies is what sets the busi- ness model apart. As such, we believe that the research questions that should be central in business model research should be: What activities should be connected? How can we develop interdependencies among activities that cannot be imitated? How can we develop superior interdependen- cies, especially when resources and capabilities are widely available and not differentiated and barriers? The answers to these questions are likely to advance our understanding of strategy more than continuing discussing whether business model is a new construct, or not.

REFERENCES

Adner, R. (2017). 'Ecosystem as structure: An actionable construct for strategy'. Journal of Management, 43, 39–58.

Adner, R. and Kapoor, R. (2010). 'Value creation in innovation ecosystems: How the structure of techno- logical interdependence affects firm performance in new technology generations'. Strategic Management Journal, 31, 306–33.

Afuah, A. (2003). 'Redefining firm boundaries in the face of the internet: Are firms really shrinking?'.

Academy of Management Review, 28, 34–53.

Albert, D., Kreutzer, M. and Lechner, C. (2015). 'Resolving the paradox of interdependency and strategic renewal in activity systems'. Academy of Management Review, 40, 210–234.

Amit, R. and Zott, C. (2001). 'Value creation in e-business'. Strategic Management Journal, 22, 493–520.

Arend, R. J. (2013). 'The business model: Present and future – beyond a skeumorph'. Strategic Organization, 11, 390–402.

Baden-Fuller, C. and Mangematin, V. (2013). 'Business models: A challenging agenda'. Strategic Organization, 11, 418–27.

Baden-Fuller, C. and Morgan, M. S. (2010). 'Business models as models'. Long Range Planning, 43, 156–71. Barney, J. B. (1986). 'Strategic factor markets: Expectations, luck, and business strategy'. Management Science, 32, 1231–41.

Barney, J. (1991). 'Firm resources and sustained competitive advantage'. Journal of management, 17, 99–120. Barney, J. B. (1997). Gaining and Sustaining Competitive Advantage. Reading, MA: Addision Wesley.

Barney, J. B. (2001). 'Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view'. Journal of Management, 27, 643–50.

Barney, J., Wright, M. and Ketchen, D. J. Jr (2001). ‘The resource-based view of the firm: Ten years after 1991’. Journal of Management, 27, 625–41.
Bell, R. G., Filatotchev, I. and Aguilera, R. V. (2014). ‘Corporate governance and investors’ perceptions of foreign IPO value: An institutional perspective’. Academy of Management Journal, 57, 301–20.
Bigelow, L. and Barney, J. (2020). What are Business Models? Working Paper.
Bigelow, L. S. and Barney, J. B. (in press). ‘What can strategy learn from the business model approach?’ Journal of Managemet Studies, in press.
Casadesus-Masanell, R. and Ricart, J. E. (2010). ‘From strategy to business models and onto tactics’. Long Range Planning, 43, 195–215.
Chandy, R. and Tellis, G. (1998). ‘Organizing for radical product innovation: The overlooked role of the willingness to cannibalize’. Journal of Marketing Research, 35, 474–87.
Chesbrough, H. (2007). ‘Business model innovation: It’s not just about technology anymore’. Strategy & Leadership, 35, 12–17.
Christensen, C. M. and Raynor, M. E. (2003). The Innovator’s Solution: Creating and sustaining successful growth.
Boston, MA: Harvard Business School Press.
Dierickx, I. and Cool, K. (1989). ‘Asset stock accumulation and sustainability of competitive advantage’.
Management Science, 35, 1504–11.
Galunic, D. C. and Eisenhardt, K. M. (1994). ‘Renewing the strategy-structure-performance paradigm’. In Staw, B. M. and Cummings, L. L. (Eds), Research in Organizational Behavior, Vol. 16. Greenwich, CT: JAI Press, 215–55.
Gresov, C. and Drazin, R. (1997). ‘Equifinality: Functional equivalence in organization design’. Academy of Management Review, 22, 403–28.
Hambrick, D. C. and Fredrickson, J. W. (2005). ‘Are you sure you have a strategy?’. Academy of Management Perspectives, 19, 51–62.
Hedman, J. and Kalling, T. (2003). ‘The business model concept: Theoretical underpinnings and empirical illustrations’. European Journal of Information Systems, 12, 49–59.
Jacobides, M. G., Cennamo, C. and Gawer, A. (2018). ‘Towards a theory of ecosystems’. Strategic Management Journal, 39, 2255–76.
Johnson, M. W., Christensen, C. M. and Kagermann, H. (2008). ‘Reinventing your business model’. Harvard Business Review, 86, 57–68.
Katz, D. and Kahn, R. L. (1978). The Social Psychology of Organizations. New York: Wiley.
Kauffman, S. A. (1993). The Origins of Order: Self-Organization and Selection in Evolution. Oxford: Oxford University Press.
Lanzolla, G. and Frankort, H. T. W. (2016). ‘The online shadow of offline signals: Which sellers get con- tacted in online B2B marketplaces?’. Academy of Management Journal, 59, 207–31.
Lanzolla, G. and Suarez, F. F. (2012). ‘Closing the technology adoption – use divide: The role of contiguous user bandwagon’. Journal of Management, 38, 836–59.
Levinthal, D. A. (1997). ‘Adaptation on rugged landscapes’. Management Science, 43, 934–50.
Lieberman, M. B. and Montgomery, D. B. (1988). ‘First-mover advantages’. Strategic Management Journal, 9, 41–58.
Markides, C. (1997). ‘Strategic innovation’. Sloan Management Review, 38, 9–23.
Markides, C. (2008). Game-Changing Strategies: How to Create New Market Space in Established Industries by Breaking the Rules. San Francisco, CA: Jossey Bass.
Markides, C. (2015). ’Research on business models: Challenges and opportunities’. Advances in Strategic Management, 33, 133–47.

Markides, C. and Geroski, P. (2005). Fast Second How Smart Companies Bypass Radical Innovation. San Francisco, CA: Jossey-Bass.
Markides, C. and Sosa, L. (2013). 'Pioneering and first mover advantages: The importance of business mod- els'. Long Range Planning, 46, 325–34.
Massa, L., Tucci, C. L. and Afuah, A. (2017). 'A critical assessment of business model research'. Academy of Management Annals, 11, 73–104.
McGrath, R. G. (2010). 'Business models: A discovery driven approach'. Long Range Planning, 43, 247–61. Ofordi-Dankwa, J. and Julian, S. (2001). 'Complexifying organizational theory: Illustrations using time re-search'. Academy of Management Review, 26, 415–30.
Osterwalder, A. and Pigneur, Y. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Hoboken, NJ: Wiley.
Peteraf, M. A. (1993). 'The cornerstones of competitive advantage: A resource-based view'. Strategic Management Journal, 14, 179–91.
Porter, M. (1979). 'How competitive forces shape strategy'. Harvard Business Review, 57, 137–45.
Porter, M. E. (1985). The Competitive Advantage: Creating and Sustaining Superior Performance. New York: Free Press. Porter, M. E. (1996). 'What is strategy'. Harvard Business Review, 74, 61–80.
Porter, M. E. (2001). 'Strategy and the Internet'. Harvard Business Review, 79, 63–78.
Porter, M. E. and Siggelkow, N. (2008). 'Contextuality within activity systems and sustainability of competi- tive advantage'. Academy of Management Perspectives, 22, 34–56.
Rivkin, J. W. (2000). 'Imitation of complex strategies'. Management Science, 46, 824–44.
Rivkin, J. W. and Siggelkow, N. (2003). 'Balancing search and stability: Interdependencies among elements of organizational design'. Management Science, 49, 290–311.
Seddon, P. B., Lewis, G. P., Freeman, P. and Shanks, G. (2004). 'The case for viewing business models as abstractions of strategy'. Communications of the Association for Information Systems, 13, 427–42.
Shankar, V., Carpenter, G. S. and Krishnamurthi, L. (1998). 'Late mover advantage: How innovative late entrants outsell pioneers'. Journal of Marketing Research, 35, 54–70.
Siggelkow, N. (2001). 'Change in the presence of fit: The rise, the fall, and the renaissance of Liz Claiborne'.
Academy of Management Journal, 44, 838–57.
Siggelkow, N. (2002a). 'Evolution toward fit'. Administrative Science Quarterly, 47, 125–59.
Siggelkow, N. (2002b). 'Misperceiving interactions among complements and substitutes: Organizational con- sequences'. Management Science, 48, 900–16.
Siggelkow, N. (2011). 'Firms as systems of interdependent choices'. Journal of Management Studies, 48, 1126–40. Siggelkow, N. and Levinthal, D. A. (2003). 'Temporarily divide to conquer: Centralized, decentralized, and reintegrated organizational approaches to exploration and adaptation'. Organization Science, 14, 650–69.
Sohl, T., Vroom, G. and Fitza, M. (2018). 'How much does business model matter for firm performance? A variance decomposition analysis'. Academy of Management Discoveries, 6, 61–80.
Spieth, P., Schneckenberg, D. and Ricart, J. E. (2014). 'Business model innovatio – state of the art and future challenges for the field'. R&D Management, 44, 237–47.
Suarez, F. F. and Lanzolla, G. (2007). 'The role of environmental dynamics in building a first mover advan- tage theory'. Academy of Management Review, 32, 377–92.
Teece, D. J. (2010). 'Business models, business strategy and innovation'. Long Range Planning, 43, 172–94. Thompson, J. D. (1967). Organizations in Action: Social Science Bases of Administrative Theory. New York: McGraw-Hill.

Tsoukas, H. (2017). ‘Don’t simplify, complexify: From disjunctive to conjunctive theorizing in organization and management studies’. Journal of Management Studies, 54, 132–53.
VanderWerf, P. A. and Mahon, J. F. (1997). ‘Meta-analysis of the impact of research methods on findings of first-mover advantage’. Management Science, 43, 1510–19.
Velu, C. and Stiles, P. (2013). ‘Managing decision-making and cannibalization for parallel business models’. Long Range Planning, 46, 443–58.
Wernerfelt, B. (1984). ‘A resource-based view of the firm’. Strategic Management Journal, 5, 171–80.
Zott, C. and Amit, R. (2007). ‘Business model design and the performance of entrepreneurial firms’. Organization Science, 18, 181–99.
Zott, C. and Amit, R. (2010). ‘Business model design: An activity system perspective’. Long Range Planning, 43, 216–26.
Zott, C., Amit, R. and Massa, L. (2011). ‘The business model: Recent developments and future research’. Journal of Management, 37, 1019–42