

## Multidexterity:

### Combining competing business models in transforming economies

#### Robert Demir

Department of Entrepreneurship and Strategy  
Lancaster University Management School  
Lancaster University  
Lancaster, LA1 4YX, United Kingdom  
[robert.demir@lancaster.ac.uk](mailto:robert.demir@lancaster.ac.uk)

and

The Ratio Institute  
Stockholm, Sweden

#### Duncan Angwin

Department of Strategy and International Business  
Nottingham University Business School  
University of Nottingham  
Nottingham NG8 1BB, United Kingdom  
[duncan.angwin@nottingham.ac.uk](mailto:duncan.angwin@nottingham.ac.uk)

*This is a pre-publication version of the manuscript that has been accepted for publication in *Management & Organization Review*, Special Issue—*Business Model Innovation in Transforming Economies**

#### Acknowledgements

We would like to thank the executives who participated in this study, the special issue editors Oli Mihalache and Henk Volberda and the special issue workshop participants for their valuable comments and feedback. This study was financially supported by Riksbankens Jubileumsfond (The Swedish Foundation for Humanities and Social Sciences).

## **Multidexterity:**

### **Combining competing business models in transforming economies**

#### **ABSTRACT**

In an attempt to respond to recent calls for better understanding the coexistence of multiple business models, we develop the concept of ‘multidexterity’— *the ability to develop, nurture, and execute several distinctive BM strategies simultaneously across different levels and functions of the MNC and its host markets*. To illustrate this approach, we describe a European healthcare firm entering the rapidly transforming economy of China and facing regulatory constraints and ambiguities in the application of industry standards. This situation is a generic challenge for MNCs entering rapidly transforming economies, which they help in turn to substantially alter and develop. We argue multidextrous business models are effective entry strategies for MNCs. They also help resolve two conceptual limitations in the BMI literature: (1) the problem of environmental contingencies and (2) the interrelatedness of factors at the macro, meso and micro levels. We address these problems from a practice approach. We provide some implications for the concept of multidexterity and business models, and address managerial challenges and prospects in developing multidextrous organizations.

**Keywords:** Multidexterity, Business Models, Practice, Internationalization, Market Regulation, Industry Standardization, China

## INTRODUCTION

Transforming economies pose significant challenges to multinational corporations' (MNCs) business models (e.g., Chan et al., 2016; Sánchez & Ricart, 2010). This is because they are characterized by uncertain, highly volatile, and changing institutional frameworks (Peng, Wang, & Jiang, 2008). For instance, China is distinguished by weaker regulatory regimes and industry standards (Tan, 2009; Tsai & Child, 1997). So, whilst business models contribute to rapid internationalization (Dunford, Palmer, & Benveniste, 2010) and local competition in transforming economies (Tallman, Luo, & Buckley, 2018), entering those economies incurs institutional and market challenges. These fundamentally threaten MNCs' business model viability (Birkinshaw, Zimmermann, & Raisch, 2016b).

A business model (BM) is defined as a bundle of specific practices, including value proposition, creation, delivery, capture and allocation (Tallman et al., 2018: 522; Teece, 2010: 172), "conducted to satisfy the perceived needs of the market" (Foss & Saebi, 2018: 13). In the context of market entry and expansion, a BM contributes to firm performance in the way resources and capabilities are configured (Zott & Amit, 2007, 2008). However, previous studies suggest that MNCs entering transforming economies should alter their existing BMs (Tallman et al., 2018; Teece, 2014), innovate new BMs that better address the changing competitive landscape (Chan et al., 2016), or introduce new BMs while simultaneously exploiting existing models (Birkinshaw et al., 2016b; Snihur & Tarzijan, 2018). Despite the recognition that firms increasingly use multiple BMs (Casadesus-Masanell & Tarzijan, 2012), adopt flexible BMs (Mason & Mouzas, 2012), and that the challenges of managing multiple BMs (Khanagha, Volberda, & Oshri, 2014; Markides, 2013; Smith, Binns, & Tushman, 2010) are discussed, recognizing some of the adverse performance effects of adopting multiple BMs simultaneously (Kim & Min, 2015; Pati et al., 2018), there remains significant limitations in this literature.

First, the literature is theoretically underdeveloped and provides limited conceptual guidance in how to manage multiple BMs simultaneously (Foss & Saebi, 2017). Second, except for a few empirical examples (Pati et al., 2018; Snihur & Tarzijan, 2018), the literature is inconclusive on how MNCs address this challenge in transforming economies. As recently noted by Tallman, Luo and Buckley (2018: 531), “in no case is “one size fits all” a suitable mantra for business models across all markets.” Yet, it remains unclear what the impact of “locational differences in BM creation” are, as most research to date is largely “pragmatic and acontextual” (Tallman et al., 2018: 533). Indeed, contextualizing business model innovation (BMI) in transforming economies is not only important for developing context-sensitive theory (Plakoyiannaki, Wei, & Prashantham, 2019), but also making such theory relevant for practice.

Our aim, in this paper, is to address the current weaknesses in BM research by exploring how contextual dynamics affect BMI in transforming economies. The literature suggests two distinctive ways in which firms may address these challenges. First, in pursuit of global integration, firms replicate their existing BMs in host markets but are liable to the different local demands and, therefore, respond to the local conditions of the host market through experimentation and co-optation of practices developed or used elsewhere (Dunford et al., 2010). Second, when firms’ find their existing BMs are threatened in the new context, notably when facing complexity in the institutional regime and turbulence in the market, they engage in trial-and-error and explore alternative BMs (Teece, 2014). To capture these disparate, yet important views into a coherent framework, we offer the concept of multidexterity, which recognizes the co-existence of multiple BMs. Specifically, multidexterity aims to explain an organization’s capability to develop and maintain multiple BMs at the same time in order to address institutional and organisational dynamics.

The concept of multidexterity, while scarcely used in the management literature, involves the enactment of “numerous different strategies and tactics” (Kodama, 2017: 167) by different

organisational actors and the simultaneous management of competing strategic agendas of different stakeholders (Ritter & Geersbro, 2018). Dispersed organisations, such as MNCs, are exposed to different stakeholders and different institutional, regulatory regimes and industrial standards in different host markets and are expected to manage these challenges locally while remaining coherent globally (Bartlett & Ghoshal, 1989). We, therefore, define multidexterity as *“the ability to develop, nurture, and execute several distinctive BM strategies simultaneously across different levels and functions of the MNC and its host markets”*. Similar to the dynamic capabilities view (Helfat et al., 2007), we assume that multidextrous MNCs have an ability to perform multiple practices simultaneously in pursuit of realizing an intended or emergent goal in any local market that challenges the firm’s global integration agenda.

To investigate multidexterity, we use an in-depth case study of a European healthcare provider who initially failed to implement a global BM in China and subsequently adopted a successful multidextrous BMI approach. From our findings we theorise the multidexterity concept in transforming economies and discuss theory and practice implications.

## **THEORETICAL BACKGROUND**

Because transforming economies are highly volatile, uncertain and characterized by changing institutional frameworks (Peng et al., 2008), the regulatory regime of such countries may offer advantages for some and disadvantages for others. Market entry into transforming economies is increasingly conditioned by market-based capabilities, that is, specific knowledge about the institutional and regulatory regimes of the host country (Peng et al., 2008). Some of the conditions underlying local market and institutional regimes may share the same characteristics as other countries, allowing transferability or adaptability globally, whereas transforming economies place high demands on products and services that need to adhere to local standards, regulatory requirements, with locally responsive marketing and distribution systems (Ghoshal & Nohria, 1993). Transforming economies, however, constantly challenge the balance between the BMs

originating from the home market and the localised BMs (Tallman et al., 2018) such that global BMs require adaptation to local needs, or arbitrating disadvantageous home country practices with advantageous host market practices (Ghemawat, 2007).

Indeed, while combining internationalisation strategies have proven effective for some MNCs (e.g. GE Healthcare), managing the tensions between the global integration and local responsiveness strategies is challenging. Transforming economies in general and China, in particular, may be advantageous for some MNC strategies (Luo & Child, 2015), but this does not mean that it is unproblematic to find a good fit between the local institutions and entrant firms' practices (Teece, 2019). On the contrary, any combination of BMs in pursuit of balancing global integration and local responsiveness is likely to be subject to the dynamism inherent between the two (Kumar & Puranam, 2011; Luo & Child, 2015).

### **BMI in Transforming Economies**

The uncertain and volatile nature of transforming economies requires localised capabilities to adapt BMs (Teece, 2014) and managerial efforts to continuously make BMs more distinctive and agile against competition (Doz & Kosonen, 2010). These capabilities are important for MNCs as they allow them to recognise differences in the local business environment and reinstate “fitness” between the firm’s global BM and the local institutional and regulatory regimes. Indeed, the adaptability of global BMs will be contingent on “how fragmented regulations and standards turn out to be” (Teece, 2019: 192) and how localised actions underpin the MNC’s host market strategy (Teece, 2014). These specific challenges have implications on BM adaptation and innovation in such environments where markets are volatile and institutional regimes are subject to rapid changes (Tallman et al., 2018; Teece, 2018).

The MNC’s value creation and value delivery model will face disruptions unless the firm substitutes key elements in its BM that reflect changes in its external business environment (Hacklin, Björkdahl, & Wallin, 2018). Depending on the strategy underpinning the new BM,

value may migrate and augment the MNC's global strategy (Ghemawat, 2007) or reinforce its localisation strategy (Luo & Child, 2015). However, earlier studies treat the transforming economy context as constant and do not provide any clues other than micro-level contingencies. Hence, in previous studies the macro-level context is not accounted for, leaving it conceptually underdeveloped and empirically limited (Markides, 2013) in the context of transforming economies (Luo & Child, 2015).

Despite the importance of maintaining a fit between BMs and local business environments, context-sensitive approaches to BMI, especially in transforming economies, remain scant (Luo & Child, 2015; Tallman et al., 2018). For example, prior studies have focused on how multiple BMs generate value (e.g., Sánchez & Ricart, 2010) and contribute to MNCs' performance in transforming economies (Kim & Min, 2015), but we know little about how existing BMs are coupled with resources in transforming economies, hence disregarding the resource dynamics involved in managing multiple BMs. There is a need for research that explores the contextual dynamics of BMI in transforming economies and captures the micro details of combining old models with new ones in order to reveal new insights.

Some studies have suggested that MNCs may refine their existing global BMs upon market entry rather than localising them. Monaghan and Tippmann (2018) found that some MNCs avoid rushing into new markets to be able to adapt their BMs. However, adaptation of BMs is part of the global integration process in which new experiences continuously add to the firms' "recipe heuristic" (Monaghan & Tippmann, 2018). Other studies have suggested different states of BMI. For example, Khanagha et al. (2014: 324), take an evolutionary view, including "incremental changes in individual components of business models, extension of the existing business model, introduction of parallel business models, [and] disruption of the business model, which may potentially entail replacing the existing model with a fundamentally different one." Such evolutionary processes towards convergence to a dominant BM encompasses BMI as an

incremental process towards local adaptation but ignore the effects of external contingencies that require more radical shifts in the MNCs BMs.

These specific contingencies not only have implications on the MNC's local organisational structure, processes and the power regime (Begley & Boyd, 2003; Ghoshal & Nohria, 1993), but also on the ability to adapt the BM to fit with the MNC's global BM. As Tallman et al. (2018) note, transforming economies spur bottom-up developments of new BMs that oppose the traditional top-down approach practiced by many MNCs (Birkinshaw et al., 2016a). This indicates that transforming economies require a close interaction between localised BMs and the orchestration of the MNC's "subsystems and processes to accomplish a specific purpose" (George & Bock, 2011: 97). However, transforming economies add to the complexity of orchestrating actors along a vertical value chain that is not under the direct ownership or bureaucratic control of the focal firm (Zeng, Simpson, & Dang, 2017).

While this recursive process between BMI and organizational design seems intuitive, Foss and Saebi (2017: 214) found that this relationship is scarcely studied and that "more research is required to understand the organizational design aspects of BMI", where BMI is defined as "nontrivial changes to the key elements of a firm's BM and/or the architecture linking these elements" (Foss & Saebi, 2017: 216). This definition suggests that BMI is an evolutionary process (Khanagha et al., 2014; Monaghan & Tippmann, 2018), led by key decision-makers in pursuit of making changes to the ordinary, yet not stabilised BM.

In sum, with some general exceptions (Casadesus-Masanell & Zhu, 2013; Markides & Oyon, 2010; Smith et al., 2010), it remains largely unclear how MNCs can strike a balance between the original BM designed to address global integration while at the same time innovating BMs for local responsiveness (Snihur & Tarzijan, 2018). Part of this complexity lies in implementing integrative yet different BMs in several geographically dispersed sites while trying to innovate BMs and adapt them to changing legal and institutional environments simultaneously



(Teece, 2018). This may be due to obstacles in transforming economies associated with the; (i) internal fit between diverse BMs, (ii) external fit with localized foreign markets, and (iii) dynamic interaction between internal and external cultural, institutional and socio-economic factors (Tallman et al., 2018). While previous studies provide some clues for how to alter the value generating and capture mechanisms in BMs in response to these factors, empirical accounts of the use and development of multiple BMs in transforming economies remains scant.

### **Multidexterity**

In addressing these limitations of multiple BMs in transforming economies, we introduce a novel concept—multidexterity. The root form—*dexterity*—is associated with readiness or skilfulness and has been used to denote start-up firms’ skilfulness in executing individual organising processes in response to international market entry uncertainties (Autio, George, & Alexy, 2011). While *dexterity* denotes deliberate and focused enactment of specific organisational capabilities at the expense of others, *multidexterity* denotes an ability to simultaneously orchestrate strategic actions within and outside the firm at multiple levels. Multidextrous organisations are further capable of balancing the inherent relationship between selection and evaluation practices. The former denotes the ability to enact multiple selection regimes, where some of which are not necessarily aligned, legitimated or resourced by the existing strategic context of the organisation (Burgelman, 1983). The multiplicity of selection regimes is dependent on the performance measurement practices as any choice will be subjected to scrutiny and evaluation, both internally and externally (Adner & Levinthal, 2008). This suggests that multidexterity implies an ability to balance the conditions emerging in one domain with those of another domain. Multidexterity, therefore, is geared towards achieving “different and multiple objectives” (Ritter & Geersbro, 2018: 75) at once.

As such, multidexterity is a bundle of practices (Schatzki, 2016) that intersect variably into other practices enacted for localised BMs. Hence, multidexterity is a multimodal capability of

performing, experiencing and evaluating activities within and outside organisational boundaries. In the case of MNCs, this implies an ability to balance the unique requirements of local markets that differ both from the global BM and unique local BM of other specific markets. For example, an actor in a supply chain may enact the same BM as another but handles industry standards with different level of skilfulness and may enact a different response strategy to local institutional norms and legal regulations than those of another market (Oliver, 1991).

Multidexterity is particularly promising for understanding how MNCs orchestrate the multiple and conflicting demands of different stakeholders, institutional and regulatory regimes, industrial standards, resources, value creation and appropriation regimes. For example, while the use of multiple BMs is essentially a response to problems of technological discontinuities (Ettlie, Bridges, & O'Keefe, 1984), autonomous middle managers (Burgelman, 1983) and frontline managers (Birkinshaw et al., 2016a), prior analytical models have not adequately captured how MNCs simultaneously orchestrate various resource dynamics in global and local BMs. For example, when BMs are exposed to international markets, value creation and value delivery activities may not only face a certain degree of disintegration, they may also undermine each other (Tallman et al., 2018). Hence, “how to obtain resource commitments for initiatives that appear foreign and at odds with existing BMs” (Adner & Levinthal, 2008: 49) remains unclear.

The concept of multidexterity, we argue, is particularly suited for this task as it helps distinguishing BMI on two dimensions i) coupling and ii) coherence. By *coupling*, we mean the extent to which BMs within the same system have interdependent variables (Weick, 1976: 3) and share specific qualities depending on the contextual dynamics of the system. For example, multiple BMs may converge around strong couplings in asset use practices and in market barrier management (Casadesus-Masanell & Tarzizán, 2012) and have loose couplings around service contracts and joint product development partnerships (Sabatier, Mangematin, & Rousselle, 2010). How parts of a system are coupled is further determined by the extent to which they are

coherent. We take *coherence* to mean the extent to which a BM is responsive to the larger value-creating ecosystem (Massa, Tucci, & Afuah, 2017), demonstrated by consistency relative to the activities constituting the system. For instance, a BM may have a distinctive supply infrastructure from another and will, in that practice site, be non-coupled with other BMs. But the same BM may have an undistinctive demand infrastructure, sharing the same customer base of another BM and may, in that practice site, be coupled with other BMs simultaneously managed by the MNC.

Based on these initial arguments, the concept of multidexterity offers a promising view of MNCs operating in complex transforming economies. We argue that while MNCs can be competitive by arbitrating between the disadvantages of different markets, multidextrous MNCs can embrace the complexity and ambiguity inherent in and around different practices. Multidexterity accepts deviations from ordinary organizational practices as natural selection and adaptation processes (Anderson, 1999) across multiple organisational sites (Schatzki, 2016). Building from these theoretical arguments, we use the concept of multidexterity to explain how multiple and seemingly contradictory BMs can be enacted in transforming economies.

## **RESEARCH CONTEXT AND METHODS**

Studying multidexterity in pursuit of BMI is contextually sensitive (Plakoyiannaki et al., 2019) and particularly suitable for MNCs operating in transforming economies (Tallman et al., 2018). Our study concerns an international healthcare service provider, OneHealth (pseudonym), that has pursued a rapid multinationalisation strategy (Monaghan & Tippmann, 2018), growing from 150 to 360 clinics (3,000 to 11,000 employees) across 19 countries including transforming economies such as Brazil, Chile, China, Russia, and Saudi Arabia. Because these countries have different regulatory frameworks, OneHealth has enacted a limitedly flexible global BM. This included a mix of freestanding clinics, management contracts with hospitals, and public-private partnerships in which OneHealth manages and operates clinics on long-term contracts on behalf of regional or local healthcare authorities.

Over the past few years, the newly formed Middle East & Asia (MEA) region has become the company's real growth engine with Saudi Arabia having developed into the biggest market globally with 35 clinics and 1,300 employees. While OneHealth's strategic target for Saudi Arabia is continued growth, it predicts to become even bigger in China over the coming 5-7 years, aspiring to become a top-3 player. To reach such a position, they "need to operate some 75-100 mid-sized clinics" as noted by the senior vice president for MEA ("SVP"). This would be a very challenging task for the global BM as OneHealth is contracted by the Ministry of Health (MoH) in Saudi Arabia whilst in China each opportunity "has to be sourced and developed from scratch in the open competitive market" (SVP). This challenge to the global BM is the research focus.

### **Research Design**

Given the emerging nature of BMI in transforming economies we used a longitudinal, multi-source data collection research design (Yin, 2009) to better capture strategy-performance relationships (Junni et al., 2013). Similar to prior studies and recommendations (Heracleous, Gößwein, & Beaudette, 2018; von Krogh, Rossi-Lamastra, & Haefliger, 2012), we inquired into this phenomenon in an early, embryonic stage, focusing on providing empirical and theoretical insights. OneHealth is a noteworthy and appropriate case for our investigation as it is an exemplar (Yin, 2009) of multidextrous BMI in a transforming economy, and so provides insight to the challenges posed to MNCs' global BMs. This case was therefore based on theoretical sampling (Yin, 2009) allowing us to explore valuable insights at this early stage of the phenomenon (von Krogh et al., 2012).

We focused our data collection on extensive secondary data and in-depth primary interview and observational data generated from well-informed actors. We collected data from the LexisNexis database (December 2007 – February 2019), which yielded 700+ unique articles, and collected all available financial reports, press releases and blog posts (approx. 150, May 2011 – February 2019). Finally, data also comprised corporate specific data, including PowerPoint

presentations, BM configurations, strategic decisions, etc. These sources were used to identify the different market entry strategies and changes to the BM.

Starting in late 2017, the first author initiated a series of semi-structured interviews and discussions (n=10) with a key informant (Yin, 2009), focusing on multidextrous BMI practice. Our informant (SVP) is a key decision maker who has “extensive and exclusive information and the ability to influence important firm outcomes, either alone or jointly with others (e.g., on a board of directors)” (Aguinis & Solarino, 2019: 3). Hence, sampling this key informant implied access to highly reliable and deep knowledge (Miles & Huberman, 1994) of multidextrous BMI activities. Similar to other scholars, we chose the SVP as he was personally responsible for the market entry (Bingham & Davis, 2012) and personally involved in BMI (Berends et al., 2016), which is typical to autonomous strategic actions by executives (Burgelman, 1983).

Interviews and discussions lasted between 30 and 90 minutes with shorter exploratory, non-directive interviews at the beginning, to establish trust and interest, longer more detailed ones later, and short gap filling ones at the end. Questions revolved around the company’s history, expansion paths, learning experiences, and failures, responses, as well as adjustments to the global BM and the details around the introduction of the new BMs. Using such directive and non-directive techniques helped us mitigate informant bias (Huber & Power, 1985; Miller, Cardinal, & Glick, 1997) and build a strong ground for theoretical insights (Eisenhardt, 1989).

In early 2018, we complemented these in-depth interviews with an observational study of a one-day open strategy workshop (Hautz, Seidl, & Whittington, 2017) in order to (1) corroborate the views of the key informant and (2) gather information on the evolution of the new BMs in vivo. Our key informant presented his case on “How to enter the Chinese market” for informed insights from 12 non-competitor executives of Western MNCs in China. The workshop resulted in excess of 300 pages of notes and photos. In adopting this approach, our goal was to identify and explain multidexterity as a bundle of practices (Schatzki, 2016). This approach suggests that

conflicts between structures and individual actions can be accommodated within the same explanatory frame (Sewell, 1992) and hence resonates well with a multidextrous approach.

## **Data Analysis**

Because multidextrous BMI is poorly theorized, we took an “abductive” process approach aiming to offer a plausible explanation to a theoretically incomplete “anomaly” (Van de Ven, 2007; Weick, 1989). This can help connect empirical observations “to extant theoretical ideas to generate novel conceptual insight and distinctions” (Langley et al., 2013: 11) by recurrently examining alternative explanations. Abduction is, therefore, particularly suited to resolve “the status quo explanation of a given phenomenon” (Van de Ven, 2007: 65), that strategies of global integration and local responsiveness can coexist through multiple BMs. Accordingly, we analysed our data in several iterative steps, aspiring to find the most plausible explanation to the practices underpinning multidextrous BMI. However, for the sake of simplicity, we present our approach sequentially.

First and consistent with single case methods (Siggelkow, 2007), we began our analysis while collecting data by reading our transcripts, notes, and other materials and condensing the data (Miles & Huberman, 1994). We wrote short narratives about the evolutionary steps in OneHealth’s BMs during its multinationalisation. Throughout the entire process, we discussed potential discrepancies in our narratives and alternative plausible explanations to multidextrous BMI and, when necessary, refined the narratives by returning to our data. Once the whole period was covered, we decomposed critical descriptive events and strategies into temporal brackets aiming to capture disruptions to the global BM, innovations, practices and the drivers of BM disruptions (see table 1).

<< INSERT TABLE 1 ABOUT HERE >>

This initial analysis revealed that the global BM was complemented by several local BMIs following a multidextrous approach. This was caused by the co-occurrence of challenges faced by

both regulatory regimes and by conflicting industrial standards facing OneHealth during market entry into transforming economies. The institutional regulatory regimes could determine the “life and death of the business”, or the extent to which the global BM supports or threatens the survival of the firm in the local market (Hill & Birkinshaw, 2014; Tallman et al., 2018). The industrial standards for medical services are instrumental for the healthcare industry’s technological environment and constitute the firms’ BM competitiveness (Casadesus-Masanell & Zhu, 2013; Volberda, Van den Bosch, & Heij, 2017). Hence, these two dimensions emerged as our main analytical springboards for better understanding multidextrous BMI in transforming economies.

In a second step, we triangulated the different data sources to derive empirically viable evidence to illustrate relationships between these environmental and technological conditions emerging from transforming economies and the actions taken for strategic change and fitness (Helfat et al., 2007). We discovered that different localized BMI were variably related to the regulatory regimes and the industrial standards of each market, revealing various degrees of coupling and coherence between local BMs and the global BM. Using this distinction, we discovered four types of BMIs which, following axial coding (Corbin & Strauss, 2008) and examining different theories to find plausible explanations for each, labelled as; resource integration, skunkworks, resource partitioning, resource orchestration (see figure 1).

<< FIGURE 1 ABOUT HERE >>

In order to substantiate our analyses, we distinguished empirical examples of multidexterity and used these to develop short narratives explaining how these relationships capture each of the elements for multidextrous BMI. We circulated these narratives to our key informant and the open strategy participants for so called “member checks” (Lincoln & Guba, 1985: 314). These did not fundamentally challenge our model; they helped us refine it and increase its credibility and reliability (Yin, 2009). The member checks helped us understand that the activities operate as

bundles (Demir, 2015) as their viability as BMs was dependent on whether they were coherent and how they were coupled with each other. This helped us to uncover multidextrous BMI practices (see marked area in figure 1).

## **FINDINGS**

Our data suggests that multidextrous BMI takes place when the regulatory and industrial standards of the transforming economy challenge the MNC's global BM. The global BM largely builds on three critical elements: i) ownership of, or control over, resources; ii) European industrial standards and iii) deregulated and unambiguous market for healthcare provision. These factors can undermine the MNE's go-to market strategy and its ability to generate value in local contexts due to their local variations. Therefore, developing alternative BMs that are either adaptations of the global BM or entirely new BMs is of central importance in highly uncertain and volatile local markets. We find that, to respond to such uncertainties, local subsidiaries challenge the conditions underlying the global BM of the MNC.

We found that, whilst OneHealth experienced significant success in entering highly regulated markets with unambiguous industry standards with their global BM, such as Saudi Arabia, they experienced failures when attempting to enter Turkey and in their first attempt to enter China. In Turkey the market was highly deregulated with decentralized business licensing and "basically no medical standards", meaning there was "too much volatility"; "doctors could attract patients from our clinics simply by offering them direct and indirect cash incentives" (SVP). Incapable of accommodating these significantly different local practices into the global BM, OneHealth divested its clinics in Turkey. They then tried to enter the Chinese renal care market with a joint venture in order to replicate their global BM logic. Again, there were ambiguous industry standards and the global BM was not effective as there were no private clinic chains for platform acquisitions available; foreign firms had restricted entry requirements; and relicensing of existing clinics was required when foreign investors acquired an already operating



clinic business. The importance of the Chinese market meant that OneHealth management decided to “realize the international high growth plan by any means possible” (SVP). Because “business model innovation is highly decentralized” (SVP), the SVP developed three alternative BMs, each with a specific characteristic common to the global BM but also with distinctive features inimical to the global BM.

These different BMs reveal several distinctive multidextrous BMI practices that are illuminated using two key organisational dimensions of multidexterity; i) coupling and ii) coherence. These two dimensions result in a typology that identifies four distinct multidextrous types: i) “resource integration”; tight coupling of resources and strong coherence with corporate policies and procedures, ii) “skunkworks” (Burgelman, 1983); practices which involve activities that are loosely coupled from the organization and not necessarily sanctioned by top management (Adner & Levinthal, 2008), iii) “resource partitioning” (Carroll, Dobrev, & Swaminathan, 2002); practices directed to partition a resource space into favourable parts vis-à-vis rivals, iv) “resource orchestration” (Sirmon et al., 2011); practices involving the arrangement and coordination of resources to gain advantages in the local marketplace. This may include structuring, bundling, integrating and leveraging for competitive advantage (Helfat & Martin, 2015). Together, these multidextrous BMs show how the MNC responded to local needs and constraints by managing their level of coupling and coherence with the global BM (see table 2).

<< INSERT TABLE 2 ABOUT HERE >>

### **Resource Integration (Quadrant 1)—The Global BM**

A significant reason for OneHealth’s international high-growth was the use of BM replication (Dunford et al., 2010) or “recipe heuristic” (Monaghan & Tippmann, 2018). OneHealth’s global BM was based on resource integration. OneHealth’s expansion into Saudi Arabia’s highly regulated transforming economy showed its global BM was only marginally adapted to the local context. The regulatory environment and prevailing industrial standards helped the local business

tightly couple its resources with the rest of the organization. This further helped create a strong coherence between the local adaptations of the global BM. Our analysis revealed three underpinning practices; resource ownership, service integration, and technological nesting.

*Resource ownership.* Resource ownership allowed the MNC to be highly distributed and complex and yet able to control the stock of resources without assuring the standards required for resource quality, immobility of private information, availability during times of high growth, market uncertainty and supply chain volatility. Although OneHealth's global BM was configured for a centralized model of market regulation and had limited ability to deal with variations across local host markets, resource ownership ensured controlled high growth in highly regulated markets. OneHealth designed its global BM to assure consistency and control across its global network of clinics by employing a full ownership strategy that allowed minority shareholder partners only as a transition strategy to overcome local regulatory liabilities. Resources such as machinery and clinics were either under the direct ownership of OneHealth or secured through long term contracts with hospitals or health authorities.

Centralized regulation enabled speedy market entry as it afforded a “one-stop-shop” logic where OneHealth was negotiating licences, terms of operation and clinic ownership with only one contractual partner (e.g. Ministry of Health, “MoH”). In dealing with only one governing body, OneHealth could gradually build trust and commitment vis-à-vis local authorities helping them to negotiate favourable conditions, thus mitigating market uncertainties. It also allowed quicker ramp up so that OneHealth's initial joint venture to run one single clinic became a five-year contract to run 50 percent of clinics managed by the MoH in just two years.

Resource ownership further helped OneHealth to rapidly and tightly couple local operations with the overall structure of the group allowing them to “integrate clinics through a 100-day and 1-year integration plan.” It also helped control medical quality standards: “Quarterly follow-up shows an impressive increase in CPM [Clinical Performance Measures] scores after a

newly acquired clinic has been integrated [and] the longer a clinic has been with OneHealth, the better the medical performance” (CMO). Central regulatory regimes also favoured OneHealth’s ownership strategy as senior management were physically located “close to clinic operations” (CEO), allowing them to have full access to patients, staff and referring medical team members (employed by hospitals). Hence, resource ownership was key to altering OneHealth’s local responsiveness in highly regulated markets and allowed senior managers to “have an intimate understanding of customer needs and thus enable(ing) us to act quickly and decisively” (CEO) to local needs, but also to constantly refine the global BM based on patient feedback on OneHealth’s “standard of quality” (CEO).

*Service integration.* In medical care delivery, the quality of service requires compliance with regulatory frameworks, industry standards, and organisation specific systems, practices and processes. The latter also warrants some degree of efficiency in service delivery and hence can serve as a value capture mechanism. However, private clinics compete on several dimensions, such as delivery of high-quality service to patients (family members are normally involved in clinic selection), retention and endorsement of clinics. Our analysis revealed that almost 50% of OneHealth’s total new patient base were referrals from existing patients and their families. Medical clinics further compete through the establishment of close trusting relationships with hospital physicians and nurses to become the alternative referral choice for patients that are dissatisfied with the service or medical quality of the existing clinic.

Our analysis revealed two integrated service practices; (1) integrated patient care, and (2) patient empowerment. Integrated patient care is the practice of coordinating the patient’s entire healthcare needs, including medical care, preventive care, management and treatment of kidney disease, and individualised patient care advise. These are monitored through patient satisfaction surveys twice a year at each clinic throughout the world and the results directly alter the global BM. However, to be able to bring the service level of clinics up to global standards, surveys are

made monthly for newly started (or acquired) clinics and as improvement is achieved, surveys are made on a quarterly basis until they reach the threshold level (90%). Further, because industry standards vary across markets, with some markets having more ambiguous standards than others, OneHealth takes advantage of their integrated value creation practice of medical care, “In new markets, the policies and procedures are rolled out in close cooperation with the local teams... benefitting from the international experience of OneHealth.” (Annual Review, 2016). While medical care services are initially locally responsive, they are designed to continuously migrate towards global standards. As the CEO noted, “we were delighted to see the progress of the integration process [in Saudi Arabia] to achieve OneHealth care standards.”

Patient empowerment practice has the same integrational structure as the renal care practice; it is designed to continuously migrate from local responsiveness to global integration. Patient empowerment is devised to make local industrial standards a baseline criterion to be coupled with internal standards rather than aspirational criteria beyond OneHealth’s internal standards. This involves educating patients to enable them “to better understand their disease and be empowered to take action to improve the quality of their lives” (Annual Review 2016). Despite some initial challenges in Saudi Arabia, patient empowerment was set to align with global standards. For example, to strengthen patient empowerment, OneHealth structurally integrated its Scientific Department with ‘Medicate’, “an umbrella for all education programs for nurses, doctors, patients, managers, etc.” (SVP).

*Technological nesting.* Given the ambiguity of local standards of medical treatment and the variation of industrial regulation across the globe, responding to local requirements for medical practice license approval is heavily dependent on coherence between local and global practice. This was achieved through technological nesting where localized variations in clinic management are gradually coupled and made coherent with a globalized standard. At OneHealth, technology nesting was viewed as “a methodology and working method for how to treat... in a standardized

way with high quality.” (SVP). This is particularly important for high reliability organizations (Weick, Sutcliffe, & Obstfeld, 1999). For instance, “Would we perform serious medical errors... that would be a serious issue... globally” (SVP). Technological nesting was, therefore, contingent on internal coupling of systems, practices and processes as well as coherence with regulations and medical standards.

Our analysis shows that technological nesting underpinned the global BM in two respects: value proposition performance and medical treatment capability. For value performance, new clinics were surveyed on patient satisfaction and medical quality for every single treatment and this was compared across OneHealth’s global clinic network. “Everything is facts based... We have statistics for fifteen years back, on every country” (SVP). In this way, technological nesting provides a dynamic performance mechanism that allows the organization to constantly track performance gaps and failures locally and globally while at the same time indicating areas of improvement. It also convinces local authorities of medical treatment capabilities and effectiveness. In addition, technology nesting is also a source of competitive advantage: “public hospitals and clinics can’t afford systems like this... you can’t achieve the same degree of benchmark as we have with 360 interconnected clinics. If you can’t follow up on performance, it’ll be difficult to improve” (SVP).

The practices of resource ownership, services integration and technological nesting show how resource integration is underpinned by tight coupling and strong coherence between the global BM and local BM (Tallman et al., 2018). Our findings add a contextual contingency to this view suggesting that with “resource integration” BMs will remain unchallenged where markets are characterised by unambiguous standards, so MNCs are unlikely to be inclined to engage in BMI. This leads to our first proposition:

***Proposition 1:*** *When transforming economies are characterized by low ambiguity in regulatory and industrial standards, MNCs are likely to use resources that are tightly coupled and strongly coherent with global BM practice.*

## **Skunkworks (Quadrant 2)**

With the increasing pressure from the owners and the board to close the gap in China by “significantly increasing the chances of success...as soon as possible” (SVP), there were few options at hand. Clinic license regulations and application procedures were lengthy, complex, and incurred high risk. Both OneHealth and other international competitors had struggled to set up their own clinics. Moreover, there were almost no prospects to make a platform acquisition that would breakeven quickly enough. In fact, the initial failures in China had pushed the OneHealth board and owners to become even more restrictive with respect to their ownership regime as they “could not afford losing this battle as both of its global competitors had recently made serious attempts to set up clinics in the Mainland [China]” (SVP). Effectively this constrained entrepreneurial initiatives and local operations using the global BM.

To compensate, the SVP resorted to skunkworks which are autonomous practices that challenge the structural context of the organization (Burgelman, 1983) and loosen the selection and validation regimes of the current strategy (Adner & Levinthal, 2008). SVP used his autonomy to work on initiatives without having them prematurely evaluated by top management. This enabled him to introduce a localised BM that was loosely coupled with the global BM and was largely incoherent with its value capture principles.

More specifically, skunkworks resulted in the acquisition of a product distributor. Whilst local BM adaptations of the group’s medical standards only allowed for marginal adjustments, the product distribution acquisition helped develop “an unorthodox business model” (SVP) and a new performance metric that did not exist in other parts of the MNC network. Essentially, it would help “quickly reach a break-even situation in China and expand the target’s existing product distribution... to generate cash in China for investing in China” (SVP). It was exactly this decoupled performance objective that merited the new BMI as a viable option. To pursue this, the new BM was developed along two dimensions of multidexterity typology. First, service

integration was reconsidered by disintegrating parts of the practices and processes and replacing them by other parts. Second, it decoupled the ownership regime of the global BM.

*Disintegrating service integration.* The main difficulties for OneHealth in the Chinese market were a complex network of layered local distributors, resulting in higher end-user prices than international markets, large international competitors that were both product and service providers (although due to complex regulations, they couldn't offer both) and a few local Chinese competitors that ran both clinics and offered the technology, which gave them the advantage of a more "seamless" value proposition. In acquiring the distributor, SVP sought to launch a double-sided BM. The first side of the BM was designed to providing hospitals with treatment machines and other equipment "for free" or at a relatively low cost, hence generating value to customers by minimizing their capital expenses. In return, the distribution business captures value from consumables sales. The other side of the BM is a so-called Price Per Treatment (PPT) model. The model, which was later named "PPT+" is largely a sourcing model offered to hospitals and includes machines, consumables and other products to the actual treatment (not the medical diagnosis). This includes the provision of some basic training to patients and medical staff as well as offering management of clinics. The SVP found the PPT model as a viable solution as, "the people who run these [distributors] have often built this business for a very long time and, have very strong contacts with the hospitals, staff, and local authorities". Despite the lack of coherence with OneHealth's global BM, especially with respect to its service regime, the PPT was designed to mitigate local constraints.

The PPT model also addressed a competitive challenge from international rivals—it was not bound to a single machine manufacturer, "even if this is more of a product business, they are neither bound to delivering products from one supplier [which is usually the case] nor inhibited by local regulations" (SVP). The product distribution offering would, however, have to be loosely coupled with OneHealth's overall organizational structure and resource base, as there are few

established systems, practices and processes to accommodate for product distribution business at the corporate level: “Our hypothesis regarding this model [PPT] is to do a quite light integration to start with, as it is a somewhat different business, and we don’t want to overload it with overhead costs.” (SVP) Hence, given the specific design of the PPT-based BM, there was little coherence with OneHealth’s service integration logic.

*Decoupling ownership.* Arbitrating the global BM with a localised BM, was a high-risk endeavour, at least initially, as the skunkworks had some dependency on the resources, processes, practices, and technologies underpinning the global BM. Acquisitions were normally of established clinics which had already passed internal project validation and selection regime controlled by global BM ownership policies. Skunkworks decoupled this ownership regime by keeping the new BM secret. As one workshop participant advised, “I think you should work your way through the market in secrecy... Do not speak so much about how you go about. Save it till later. Tell it along the way, till you get the licenses and work your way into the market.” Because hard proof of the viability of the PPT model was missing, the SVP continued “underground” until he had secured the conditions for acquiring the local Chinese distributor.

The global BM required full ownership of local businesses but instead, SVP liaised with lawyers to acquire the distributor using a local partner. Although the local partner was indirectly a shareholder in OneHealth, the legal setup circumvented the internal ownership policy. While the acquisition fully complied with Chinese foreign ownership regulations, it was unconventional for OneHealth’s board and owners as it was a decoupling of the global BM ownership policy. Setting up a JV with a remote partner was unconventional especially as the new (quasi) wholly-owned venture had built a BM based on (1) agreements with a hospital in south China to operate its new built clinic as a management contract, (2) acquired two different private actors running independent clinics, and (3) an additional acquisition of another medical products distributor to be used as a vehicle for market entry into the medical care sector. When challenged by workshop



participants on the long-term viability of this model, SVP argued that “Although indirectly, this model can be regarded as a wholly owned OneHealth business and, surely, we will always be treated as a foreign investor in China, we have freed ourselves from the uncertainty of having a Chinese minority owner.”

The PPT model responded to the local conditions with the lengthy or “prohibitively long licensing procedures” by being “an effective way to buy some time for success to happen in China” (SVP). The model further helped address the financial pressures exerted from headquarters with the distribution business yielding financial breakeven less than six months after the acquisition. In this respect, a skunkworks BM was a crucial means to achieve local responsiveness despite conflicting with validated performance measures in the global BM.

The BMI literature has largely ignored skunkworks, focusing more on adaptations of structure, scale and scope of organisations (Fjeldstad & Snow, 2018) but our findings show that skunkworks can expand beyond both resource and structural boundaries of an MNC.

Skunkworks are likely to emerge as distinctive practices in an MNC’s multidextrous activities when the firm’s global BM is challenged in transforming markets that are characterised by high entry barriers, low degrees of private investment, poor evidence of institutional learning and decentralized regulatory bodies. Where managers can disentangle themselves from formal organisational structures by taking advantage of resources that are loosely coupled with the organization’s core business and are marginally coherent with existing resources in the local environment, there will be opportunities for BMI skunkworks in order to be locally responsive.

This leads us to our second proposition:

***Proposition 2:*** *When transforming economies are characterized by high regulatory ambiguity and industrial standards that are inimical with MNCs’ global BMs, new BMs will be developed through skunkworks using resources that are loosely coupled and weakly coherent with global BM practice.*

### **Resource Partitioning (Quadrant 3)**

Competition in the Chinese healthcare industry is focused to larger cities and provinces and mainly based on the size of the clinic base. Medical care resources are, therefore, highly concentrated in large more medically sophisticated public hospitals (L3): “Dialysis is currently mostly done in L3 hospitals. This is an extremely underserved market with c.1/3 patients on the waiting list. But tiered healthcare has constrained the expansion of L3 hospitals” (Deputy president L3 hospital). Moreover, the pricing structure of L3 hospitals varies across the population, normally requiring a higher relative share to be paid by the patient and a higher total cost incurred—between 11% and 14% variation between L1 and L3 hospitals across different geographical markets. However, recent government reforms caused some patients to be redirected to smaller hospitals and the private sector creating space for resource partitioning in the market, and increasing ambiguity for new entrants, as treatment standards were vaguely defined and clinic licencing procedures were opaque: “There are also provincial and city-level requirements that are not always specified in publicly available sources” (SVP).

Acquiring a distributor would help address this opportunity through the new PPT+ BM allowing coherence with OneHealth’s global BM on two levels. First, it responds to OneHealth’s value capture policy. As the SVP noted, although “the board of directors says, ‘We must earn profits within six years’, we can actually offer a profitable business from day one” (SVP). Given the local conditions, the PPT+ model was designed to augment OneHealth’s value capture policy (i.e. reimbursement system) as it was well entrenched in a province where the reimbursement levels were “in acceptable levels with the policy”. Second, the PPT+ model is scalable and can be used as a platform for expansion, thereby restoring OneHealth’s international high growth plans. However, the PPT+ model challenged the global BM in two respects:

*Augmenting service integration.* To be able to compete in China, the PPT+ model required a unique service integration platform. This was done by reconciling the exclusive focus on

upstream service integration inherent in the global BM, with the distributor's contracts. The contracts were used as levers to augment their old clinic operations model to be exclusively based on medical care. The PPT+ model was based on "converting the existing hospital contracts from products and some limited service elements into full-fledged medical service management contracts" (SVP). The PPT+ model further implied using an existing product distribution platform with weak coherence with both the existing resource base and the global BM for developing a fully integrated dialysis product offering and treatment service. Because the original PPT model was to a large extent based on product distribution to hospitals, OneHealth used the PPT+ model to leverage the distributor's relational position in some regions in China. The relations were important as they provided opportunities to establish a strong coherence with local medical standards using the materials sold to hospitals as a learning and influencing platform. In this way the practices carried out by medical technology salespeople helped accessing medical care practices.

Hence the PPT+ model coupled high concentration of resources, residing mainly in L3 hospitals, with strongly coherent resources at the fringes of Chinese hospitals' medical practices. Specifically, the PPT+ model enabled access to medical care via two legally separated units supplying a whole range of medical services, clinic management, machinery and consumables to local hospitals. As noted by the SVP, "in other countries OneHealth is a clean clinic operator. But, in this case we invest in the owners of the existing supply company who have very well-established contacts with authorities and hospitals; thus, we consider it a very good platform to build clinics on". Even though the PPT+ model threatened the global BM, as emphasised by the SVP: "We haven't done this anywhere else in the world. We are a total service provider now and we've never bothered about selling products, only buying them...", the PPT+ model also augmented the service integration element of OneHealth's BM.

*Refitting technological nesting.* OneHealth's global BM competes on the supply side variable of its medical quality benchmarking system: "It's actually our medical quality benchmarking between clinics within and between clinics in OneHealth and the rest of the private/public sector *and* patient satisfaction we [compete on]" (SVP). However, markets are characterised by "Healthcare providers, public as well as private are very reluctant at sharing medical outcomes... and because different actors can choose to measure certain aspects and not others or measure certain aspects in slightly different ways, results are difficult to compare on an apple-by-apple basis" (SVP). This creates information asymmetries in the market which OneHealth can use to its advantage, as a measure of value creation, which aligns with its value-based pricing model that the CEO and President see as a future model of pricing medical services. However, in China reimbursement levels vary across different regions and hospitals making patients liable to a co-payment agreement where the cost of care is split between patients and the health insurance system. Thus, the value-based pricing model underpinning the global BM needed refitting in the PPT+ model.

Specifically, value-based pricing in the global BM was contingent on (1) rigorous, internationally standardized and institutionalized measurement standards, (2) that treatments were measured systematically, and (3) continuous improvements in the quality of care could be proven, and (4) eventually normalized at validated and accepted level of medical quality in a short time span. However, the PPT+ model incorporated a value capture model where legitimacy was based on (a) trusted medical equipment (machinery and disposables) expertise and (b) clinic business and managerial expertise, and (c) a "proof-of-concept" drawn from OneHealth's "international success stories". Hence, rather than garnering more value from upstream value creating activities by adjusting backstream activities (a strategic position refined in the global BM), the PPT+ model was refitted such that it created even stronger coherence with the entire value chain. In this way, the PPT+ model leveraged on the concentration of medical technology at the core of the Chinese healthcare by soaking up peripheral capabilities inherent in OneHealth's global BM.

The BM innovation of PPT+ shows that an ambiguous regulatory framework and opaque local standards will lead local managers to take advantage of resources that are loosely coupled with the organization's core business but strongly coherent with local resources which maybe relatively novel and peripheral in the resource space. This leads us to our third proposition suggesting that contextual conditions underpinning resource partitioning may drive MNCs' local BM innovation:

***Proposition 3:*** *When specific industries in transforming economies are characterized by resource partitioning, BMI practice will be strongly coherent with local demands but loosely coupled with global BM practice.*

#### **Resource Orchestration (Quadrant 4)**

OneHealth's China operations had quickly moved from a failed single BM operation to a multidextrous BM configuration of running several BMs in parallel. Although the global BM was built on the idea of global integration, OneHealth had a resource and capability base sufficient to address the local Chinese conditions. To make use of such resource slack, OneHealth recombined its flexible managerial structure in China to better orchestrate the resources between the weakly coherent units residing in the new BMs (see above) with the global BM. For the sake of simplicity, we term this model PPT++. This was enabled by combined investments in the distributor and managerial abilities to shift and balance between different duties and areas of expertise. Each manager was multi-competent with several years of experience and could therefore see the needs and challenges of local responsiveness. The PPT++ model was devised to orchestrate this resource and asset base by combining elements of the three BM models to create a unique model. To be able to access local licenses and speed up market entry, both dominant aspects of the global BM—ownership and service integration—were adapted.

*Distributing ownership.* A positive outcome of the failed initial JV was that a new senior executive joined OneHealth. With a wide network among hospital clinics, the local executive had

spotted doctors who had considered running their own clinics but had little resources and other expertise. While the global BM was strict on its ownership policy, the PPT++ model reconsidered this by setting up an individual partnership program with doctors and other medical experts who were both recognized for their expertise and had an entrepreneurial drive to “operate a professional clinic according to international standards”. The program was initially rolled out in some select regions and quickly gained traction among local medical entrepreneurs. The individual entrepreneurs would not only help realize OneHealth’s plans for China by opening new clinics but were also important for gaining necessary contacts with local authorities. As the SVP explained, “The rules in China are very opaque. That’s why we try to work with this local partner by acquiring part of the company. Because they have already received licenses, then it must somehow indicate that they... have a relationship [with local health authorities] needed to acquire licenses for operating clinics.” While beneficial indeed, this was only a liminal stage in establishing a more large-scale acquisition and greenfield operation. Partnering with these local doctors also helped creating further links with local medical service suppliers with whom the doctors had been dealing in their previous positions at the hospitals.

*Retrofitting service integration.* Well aware that “the alignment of operating requirements to a common standard nationally should simplify OneHealth’s management”, SVP retrofitted the so called “platform acquisition” model upon which the global BM had operated. The new model implied that the acquired product distributor would be used as a “base for accelerated clinic development” (SVP). PPT++ was built on a reversed ‘value extension’ model, that is, using the localised value generation model (i.e. product distribution) as a vehicle to its global service delivery model rather than the other way around.

The distributor’s close relationships with the local hospitals further provided access to recruiting professional medical staff needed to run the new clinics, “We also have an advantage in their management contracts with local clinics that can be used for recruiting people and building

on their close relationships with the hospitals as a total service provider” (SVP). These management contracts were used such that the partner owned the clinic license, but OneHealth controls the management and de facto operates the clinic. “The key benefit here is that we don’t need to worry about a clinic relicensing, but on the other hand we are in a weaker position as we are not the license holder.” Further, the PPT++ model positioned them as a reliable total solutions provider rather than a medical care provider, advantaging them over others to be granted new licenses to open more clinics and reapproval of existing licenses.

In addition, the PPT++ model expanded vertically. For example, shortly after the PPT+ model was launched, OneHealth acquired a clinic in Hong Kong to “benefit from the CEPA [Close Economic Partnership Agreement] rules for 100% investments in mainland China” (SVP). Using the regulatory framework, OneHealth used the acquisition for entry and further clinic acquisitions in Mainland China. In this way, the PPT++ model was designed to orchestrate its local distributor networks, local doctors and the Hong Kong based partner to acquire another distribution company with hospital contracts in two provinces in China. Using these distributors helped processing clinic license applications at a larger scale. As reported recently, “26 independent clinic license applications are being progressed [in various regions] with the minority holder [HK partner]” (SVP). The PPT++ model was devised such that OneHealth could use these relationships to make joint clinic license applications, “As part of this set-up, we have handed in a number of joint clinic applications (greenfield investments), of which 4 already approved by the MoH, with the first clinic starting construction in December [2018]” (SVP).

In transforming economies where regulatory frameworks inhibit tight coupling between MNCs’ global resources and local assets, localised BMIs will take advantage of slack resources and orchestrate them in novel ways to effectively respond to local needs. In the case of PPT++ OneHealth was able to loosen its ownership regime to better orchestrate localised assets by accepting local and distributed ownership in order to speed up market expansion and elevate

value capture. Also, localised BMs could retrofit existing service integration practices through alternative value generating activities as vehicles for value extension. These show that novel attributes and efficiency seeking can be orchestrated effectively to achieve local responsiveness even though this means weak coherence with global BM practices. This leads us to our fourth proposition:

**Proposition 4:** *When transforming economies have restrictive regulatory frameworks of foreign ownership of local assets, new BMs will be developed around resource orchestration of assets that are strongly coupled locally and weakly coherent with global BM practice.*

## **DISCUSSION: TOWARDS A MULTIDEXTROUS VIEW OF BMI**

We introduced the concept of multidexterity to explain an organization's capability to develop and maintain multiple BMs simultaneously to be able to respond to institutional and organisational dynamics. This implies being able to keep “one hand for the globally consistent umbrella model *and one for each local adaptation*” (Tallman et al., 2018: 518-519, emphasis added). Hence, multidexterity embraces the *inclusion* of *multiple* models and is neither a version of “dexterity”; a *single* BM capability or skilfulness (Autio et al., 2011), or “ambidexterity”; *dual* BMs that are *dichotomous* or *orthogonal* (Gupta, Smith, & Shalley, 2006). Multidexterity, we argue, is not only conceptually different, but seems to be a “defining characteristic of the 21st century enterprise” (Grant, 2008: 479). Yet, the concept is “notably overlooked and underutilized” (Ritter & Geersbro, 2018: 75) in management research. However, our findings reveal several important conceptual characteristics that extend and substantiate the concept of multidexterity.

First, our case shows that global BMs are contingent on unambiguous regulatory frameworks and industry standards, and resource integration regimes serve as important boundary conditions for multidexterity. For OneHealth these conditions were met in Saudi Arabia, but in Turkey and the first attempt to enter China failed due to ambiguous regulatory frameworks and unclear industry standards. These findings are important contingencies for the effective use of “industry recipes” (Monaghan & Tippmann, 2018) and reliance on resources



integral in global BMs (Snihur & Tarzijan, 2018). These conditions suggest that MNCs will be reluctant to disrupt global BM structures (Tallman et al., 2018) and engage in BMI beyond the existing strategic agenda of the MNC (Adner & Levinthal, 2008).

Second, MNCs operating in transitioning economies are commonly inclined to arbitrate their original full-ownership regime (Luo, 2001) for more favourable regimes in the transitioning context (Witt & Lewin, 2007). To be able to maintain local BMs alongside global BMs, MNCs are likely to give up certain products and service practices when entering transitioning markets (Ghemawat, 2007). From the view of multidexterity, these are necessary but insufficient conditions for maintaining the global BM while developing local BMs. Our findings revealed that, only when the transitioning economy has unfavourable institutional frameworks for MNCs' global BMs, will they consider arbitrating components of the global BM. However, this is only a viable option when the industrial and technological standards offer an opportunity to act entrepreneurially despite being inconsistent with the firm's BM (Ozcan & Eisenhardt, 2009). Managers will under such conditions engage in skunkworks to arbitrate the MNC's organisational and strategic context (Burgelman, 1983) by developing new performance regimes (Adner & Levinthal, 2008). Our findings show that MNCs in transforming economies can do so by taking advantage of loosely coupled resources and weakly coherent practices, such as the use of informal ties (Martin, 2014) and open strategy network (Hautz et al., 2017) in pursuit of localised BMs. In this way, skunkworks offers a distinctive practice space within multidextrous BMI by means of accommodating several types of resource and practice couplings simultaneously (Orton & Weick, 1990) despite the unique configuration of the global BM.

Third, transforming economies characterized by dense concentration of large generalised local incumbent actors leave underutilised resources to be soaked up by entrant firms. Under such conditions, entrant firms are inclined to take advantage of resource partitioning (Carroll et al., 2002) by leveraging local regulations. While such environmental contingencies may be at odds

with the global BM of the MNC, the multidextrous approach suggests that resource commitments can be made by using existing ownership regimes, thereby remaining strongly coherent with global BM practice. Our findings, demonstrate that some degree of supply chain integration (e.g., acquiring distributor) can help developing local BM by taking advantage of underutilised resources in the market and by loosening the coupling between the MNCs service and technology regimes from the global BM. This finding suggests that multidexterity, as opposed to other lenses, can help firms responding to market complexities by enacting BM practices that are variably interconnected in bundles of practices (Schatzki, 2016). In this way, the multidextrous framework offers a conceptual apparatus to better understand how resource partitioning can help bridging micro, meso and macro level contingencies in BMI in transforming economies.

Fourth, a common challenge of MNCs is to adequately orchestrate their resources when the distance (e.g., institutional, cultural, economic) between the home and host country increases (Verbeke & Kano, 2016). Our findings substantiate and extend this conceptual argument, suggesting that multidextrous BMI is a distinctive practice, which can orchestrate both distributed ownership of local assets and retrofitting the global BM's service regime by taking advantage of local resources. This is an extension of the BMI literature, which suggests that resource orchestration can be achieved by technology integration and managerial industry experience (Frankenberger & Stam, 2020). We further argue that from a multidexterity perspective, resource orchestration may gradually extend the overall scope of the global BM and different local BMs to maintain a minimum degree of fitness between the firm's technology regime with the external environment (Helfat et al., 2007). Such coherence includes, but is not limited to alignment with emerging industry standards (Ozcan & Eisenhardt, 2009) but also to the regulatory framework of local host markets. Our findings show that local managers' specialist knowledge is instrumental in leveraging slack resources and capabilities and orchestrating them to

fit emergent service requirements in the market. These findings suggest that MNCs enacting multidextrous BMI can use resource orchestration when (i) resources are available and adaptable to new local BMs and (ii) the local organisation has a coordination flexibility to adopt those resources (Sanchez, 1995).

## **CONCLUSION**

The aim of this study was to contribute to the limited understanding of development and enactment of multiple BMs by Western MNCs in transforming economies. We proposed the concept of multidexterity as a viable way to account for institutional and organisational dynamics in BMI. In doing so, we contribute in several ways to the emergent literature on BMI in general (Foss & Saebi, 2017, 2018) and in transforming economies, in particular (Tallman et al., 2018). We reveal how MNCs develop and combine competing BMs in transforming economies depending on the extent to which regulatory frameworks and industry standards are ambiguous or opaque. We propose the concept of multidexterity as a response to the limitations of extant literature on BMI in explaining the underpinning mechanism by which firms can simultaneously deploy multiple conflicting BMs during market entry. We found that institutional contingencies play a major role for which strategies MNCs can adopt in developing local BMs. Through our conceptualisation of multidexterity, we outline some conditions that may affect different types of BMI practices. Accounting for the extent to which institutional contingencies pose challenges to global BMs, we proposed a typology that shows that BMI practices involve skunkworks, resource partitioning and resource orchestration, that take advantage of resources, assets and capabilities that are variably coupled and coherent with global BMs.

There are benefits in considering multidextrous BMs as a way of better fitting a complex changing context. In large complex transforming countries such as China, it is highly unlikely that one solution will work in all regions and areas (Verbeke & Kano, 2016). A multidextrous approach to BMI is, therefore, particularly suited to address such contingencies that span micro,

meso and macro level phenomena. Our findings have shown that activities that constitute a BM's 'value system' are interdependent with multiple actors' activities at the individual level (e.g., individual managers), group level (e.g., clinics), organizational level (e.g., distributors, hospitals) and institutional level (e.g., regulations and standards). However, the number and strength of these interdependencies can vary from activity to activity and may change over time causing interdependencies to emerge, change, or dissolve as a result of corporate entrepreneurial activities. This suggests that couplings within and between bundles of practices and systems are dynamic and may be both adaptive and maladaptive at different times (Glassman, 1973). These characteristics suggest that multidextrous BMI practices compound such that they present themselves as dynamic activity bundles (Demir, 2015).

This is not to underestimate the complexity involved in the tensions that may arise within such a practice bundle. Therefore, internal costs arising from duplication of effort and complexity and benefits such as innovation, should be weighed up against benefits in the market where a multidextrous approach may more closely fit with variations in customer demands. This may raise new ways of thinking about multidexterity in terms of appreciating the complexity of coordinating structures and roles that allow organizations to orchestrate resources in order to retain flexibility and responsiveness between global, regional and local BMs (Verbeke & Kano, 2016). MNCs may find multidexterity a useful concept for considering cross border market entry strategies in transforming economies where simultaneous multiple BMs may be an effective hedge against uncertainty when overall benefits are anticipated to be substantial.

## REFERENCES

- Adner R, Levinthal D. 2008. Doing versus seeing: Acts of exploitation and perceptions of exploration. *Strategic Entrepreneurship Journal* **2**(1): 43-52
- Aguinis H, Solarino AM. 2019. Transparency and replicability in qualitative research: The case of interviews with elite informants. *Strategic Management Journal* **40**(8): 1291-1315
- Anderson P. 1999. Complexity Theory and Organization Science. *Organization Science* **10**(3): 216-232

- Autio E, George G, Alexy O. 2011. International Entrepreneurship and Capability Development—Qualitative Evidence and Future Research Directions. *Entrepreneurship Theory and Practice* **35**(1): 11-37
- Bartlett CA, Ghoshal S. 1989. *Managing Across Borders: The Transnational Solution*. Harvard Business School Press: Boston, MA
- Begley TM, Boyd DP. 2003. The need for a corporate global mind-set. *MIT Sloan Management Review* **44**(2): 25-32
- Berends H, Smits A, Reymen I, Podoyntsyna K. 2016. Learning while (re)configuring: Business model innovation processes in established firms. *Strategic Organization* **14**(3): 181-219
- Bingham CB, Davis JP. 2012. Learning Sequences: Their Existence, Effect, and Evolution. *Academy of Management Journal* **55**(3): 611-641
- Birkinshaw J, Crilly D, Bouquet C, Lee SY. 2016a. How Do Firms Manage Strategic Dualities? A Process Perspective. *Academy of Management Discoveries* **2**(1): 51-78
- Birkinshaw J, Zimmermann A, Raisch S. 2016b. How Do Firms Adapt to Discontinuous Change? *California Management Review* **58**(4): 36-58
- Burgelman RA. 1983. Corporate entrepreneurship and strategic management: Insights from a process study. *Management Science* **29**(12): 1349-1364
- Carroll GR, Dobrev SD, Swaminathan A. 2002. Organizational processes of resource partitioning. *Research in Organizational Behavior* **24**: 1-40
- Casadesus-Masanell R, Tarzuján J. 2012. When One Business Model Isn't Enough. *Harvard Business Review* **90**(1/2): 132-137
- Casadesus-Masanell R, Zhu F. 2013. Business model innovation and competitive imitation: The case of sponsor-based business models. *Strategic Management Journal* **34**(4): 464-482
- Chan T, Gountas S, Zhang L, Handley B. 2016. Western firms' successful and unsuccessful business models in China. *Journal of Business Research* **69**(10): 4150-4160
- Corbin JM, Strauss AL. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3 ed.). Sage: London
- Demir R. 2015. Strategic Activity as Bundled Affordances. *British Journal of Management* **26**(S1): S125-S141
- Doz YL, Kosonen M. 2010. Embedding Strategic Agility: A Leadership Agenda for Accelerating Business Model Renewal. *Long Range Planning* **43**(2-3): 370-382
- Dunford R, Palmer I, Benveniste J. 2010. Business Model Replication for Early and Rapid Internationalisation: The ING Direct Experience. *Long Range Planning* **43**(5): 655-674
- Eisenhardt KM. 1989. Building Theories from Case Study Research. *Academy of Management Review* **14**(4): 532-550
- Ettlie JE, Bridges WP, O'Keefe RD. 1984. Organization Strategy and Structural Differences for Radical Versus Incremental Innovation. *Management Science* **30**(6): 682-695
- Fjeldstad ØD, Snow CC. 2018. Business models and organization design. *Long Range Planning* **51**(1): 32-39
- Foss NJ, Saebi T. 2017. Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go? *Journal of Management* **43**(1): 200-227
- Foss NJ, Saebi T. 2018. Business models and business model innovation: Between wicked and paradigmatic problems. *Long Range Planning* **51**(1): 9-21
- Frankenberger K, Stam W. 2020. Entrepreneurial copycats: A resource orchestration perspective on the link between extra-industry business model imitation and new venture growth. *Long Range Planning* **53**(4): 101872
- George G, Bock AJ. 2011. The business model in practice and its implications for entrepreneurship research. *Entrepreneurship Theory and Practice* **35**(1): 83-111
- Ghemawat P. 2007. Managing differences: The central challenge of global strategy. *Harvard Business Review* **85**(3): 58-68

- Ghoshal S, Nohria N. 1993. Horses for courses: Organizational forms for multinational corporations. *Sloan Management Review* **34**(2): 23-35
- Glassman RB. 1973. Persistence and loose coupling in living systems. *Systems Research and Behavioral Science* **18**(2): 83-98
- Grant RM. 2008. The Future of Management: Where is Gary Hamel Leading Us? *Long Range Planning* **41**(5): 469-482
- Gupta AK, Smith KG, Shalley CE. 2006. The Interplay between Exploration and Exploitation. *Academy of Management Journal* **49**(4): 693-706
- Hacklin F, Björkdahl J, Wallin MW. 2018. Strategies for business model innovation: How firms reel in migrating value. *Long Range Planning* **51**(1): 82-110
- Hautz J, Seidl D, Whittington R. 2017. Open Strategy: Dimensions, Dilemmas, Dynamics. *Long Range Planning* **50**(3): 298-309
- Helfat CE, Finkelstein S, Mitchell W, Peteraf MA, Singh H, Teece DJ, Winter SG. 2007. *Dynamic capabilities: Understanding strategic change in organizations*. Blackwell: Malden, MA
- Helfat CE, Martin JA. 2015. Dynamic Managerial Capabilities: Review and Assessment of Managerial Impact on Strategic Change. *Journal of Management* **41**(5): 1281-1312
- Heracleous L, Gößwein J, Beaudette P. 2018. Open Strategy-Making at the Wikimedia Foundation: A Dialogic Perspective. *Journal of Applied Behavioral Science* **54**(1): 5-35
- Hill SA, Birkinshaw J. 2014. Ambidexterity and Survival in Corporate Venture Units. *Journal of Management* **40**(7): 1899-1931
- Huber GP, Power DJ. 1985. Retrospective Reports of Strategic-Level Managers: Guidelines for Increasing Their Accuracy. *Strategic Management Journal* **6**(2): 171-180
- Junni P, Sarala RM, Taras V, Tarba SY. 2013. Organizational Ambidexterity and Performance: A Meta-Analysis. *Academy of Management Perspectives* **27**(4): 299-312
- Khanagha S, Volberda H, Oshri I. 2014. Business model renewal and ambidexterity: structural alteration and strategy formation process during transition to a Cloud business model. *R&D Management* **44**(3): 322-340
- Kim SK, Min S. 2015. Business Model Innovation Performance: When does Adding a New Business Model Benefit an Incumbent? *Strategic Entrepreneurship Journal* **9**(1): 34-57
- Kodama M. 2017. *Developing Holistic Leadership: A Source of Business Innovation*. Emerald Publishing: Bingley
- Kumar N, Puranam P. 2011. Have you restructured for global success? *Harvard Business Review* **89**(10): 123-128
- Langley A, Smallman C, Tsoukas H, Van de Ven AH. 2013. Process Studies of Change in Organization and Management: Unveiling Temporality, Activity, and Flow. *Academy of Management Journal* **56**(1): 1-13
- Lincoln YS, Guba EG. 1985. *Naturalistic Inquiry*. Sage Publications: Newbury Park, CA
- Luo Y. 2001. Determinants of local responsiveness: perspectives from foreign subsidiaries in an emerging market. *Journal of Management* **27**(4): 451-477
- Luo Y, Child J. 2015. A Composition-Based View of Firm Growth. *Management and Organization Review* **11**(3): 379-411
- Markides CC. 2013. Business Model Innovation: What Can the Ambidexterity Literature Teach us? *Academy of Management Perspectives* **27**(4): 313-323
- Markides CC, Oyon D. 2010. What to Do Against Disruptive Business Models (When and How to Play Two Games at Once). *MIT Sloan Management Review* **51**(4): 25-32
- Martin X. 2014. Institutional Advantage. *Global Strategy Journal* **4**(1): 55-69
- Mason K, Mouzas S. 2012. Flexible business models. *European Journal of Marketing* **46**(10): 1340-1367
- Massa L, Tucci CL, Afuah A. 2017. A Critical Assessment of Business Model Research. *Academy of Management Annals* **11**(1): 73-104

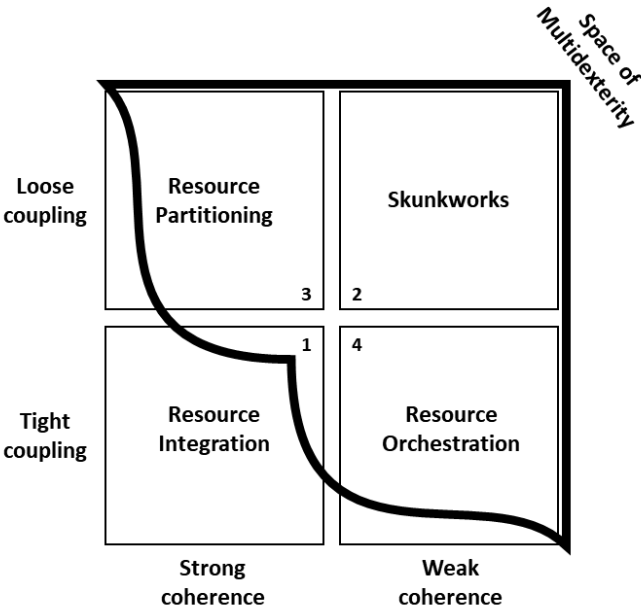
- Miles MB, Huberman A. 1994. *Qualitative data analysis: An expanded sourcebook*. Sage: Thousand Oaks
- Miller CC, Cardinal LB, Glick WH. 1997. Retrospective Reports in Organizational Research: A Reexamination of Recent Evidence. *Academy of Management Journal* **40**(1): 189-204
- Monaghan S, Tippmann E. 2018. Becoming a multinational enterprise: Using industry recipes to achieve rapid multinationalization. *Journal of International Business Studies* **49**(4): 473-495
- Oliver C. 1991. Strategic Responses to Institutional Processes. *Academy of Management Review* **16**(1): 145-179
- Orton JD, Weick KE. 1990. Loosely Coupled Systems: A Reconceptualization. *Academy of Management Review* **15**(2): 203-223
- Ozcan P, Eisenhardt KM. 2009. Origin of Alliance Portfolios: Entrepreneurs, Network Strategies, and Firm Performance. *Academy of Management Journal* **52**(2): 246-279
- Pati RK, Nandakumar MK, Ghobadian A, Ireland RD, O'Regan N. 2018. Business model design–performance relationship under external and internal contingencies: Evidence from SMEs in an emerging economy. *Long Range Planning* **51**(5): 750-769
- Peng MW, Wang DYL, Jiang Y. 2008. An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies* **39**(5): 920-936
- Plakoyiannaki E, Wei T, Prashantham S. 2019. Rethinking Qualitative Scholarship in Emerging Markets: Researching, Theorizing, and Reporting. *Management and Organization Review* **15**(2): 217-234
- Ritter T, Geersbro J. 2018. Multidexterity in customer relationship management: Managerial implications and a research agenda. *Industrial Marketing Management* **69**: 74-79
- Sabatier V, Mangematin V, Rousselle T. 2010. From Recipe to Dinner: Business Model Portfolios in the European Biopharmaceutical Industry. *Long Range Planning* **43**(2): 431-447
- Sánchez P, Ricart JE. 2010. Business model innovation and sources of value creation in low-income markets. *European Management Review* **7**(3): 138-154
- Sanchez R. 1995. Strategic flexibility in product competition. *Strategic Management Journal* **16**(S1): 135-159
- Schatzki TR. 2016. Practice theory as flat ontology. In G Spaargaren, D Weenink, M Lamers (Eds.), *Practice Theory and Research—Exploring the dynamics of social life*. 28-42. Routledge: London
- Sewell WH, Jr. 1992. A Theory of Structure: Duality, Agency, and Transformation. *American Journal of Sociology* **98**(1): 1-29
- Siggelkow N. 2007. Persuasion with Case Studies. *Academy of Management Journal* **50**(1): 20-24
- Sirmon DG, Hitt MA, Ireland RD, Gilbert BA. 2011. Resource Orchestration to Create Competitive Advantage: Breadth, Depth, and Life Cycle Effects. *Journal of Management* **37**(5): 1390-1412
- Smith WK, Binns A, Tushman ML. 2010. Complex Business Models: Managing Strategic Paradoxes Simultaneously. *Long Range Planning* **43**(2): 448-461
- Snihur Y, Tarzijan J. 2018. Managing complexity in a multi-business-model organization. *Long Range Planning* **51**(1): 50-63
- Tallman S, Luo Y, Buckley PJ. 2018. Business models in global competition. *Global Strategy Journal* **8**(4): 517-535
- Tan J. 2009. Institutional Structure and Firm Social Performance in Transitional Economies: Evidence of Multinational Corporations in China. *Journal of Business Ethics* **86**(2): 171-189
- Teece DJ. 2010. Business Models, Business Strategy and Innovation. *Long Range Planning* **43**(2–3): 172-194
- Teece DJ. 2014. A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies* **45**(1): 8-37

- Teece DJ. 2018. Business models and dynamic capabilities. *Long Range Planning* **51**(1): 40-49
- Teece DJ. 2019. China and the Reshaping of the Auto Industry: A Dynamic Capabilities Perspective. *Management and Organization Review* **15**(1): 177-199
- Tsai ST, Child J. 1997. Strategic Responses of Multinational Corporations to Environmental Demands. *Journal of General Management* **23**(1): 1-22
- Van de Ven AH. 2007. *Engaged Scholarship: A Guide for Organizational and Social Research*. Oxford University Press: Oxford
- Verbeke A, Kano L. 2016. An internalization theory perspective on the global and regional strategies of multinational enterprises. *Journal of World Business* **51**(1): 83-92
- Volberda H, Van den Bosch FAJ, Heij K. 2017. *Reinventing Business Models: How Firms Cope with Disruption*. Oxford University Press: Oxford
- von Krogh G, Rossi-Lamastra C, Haefliger S. 2012. Phenomenon-based Research in Management and Organisation Science: When is it Rigorous and Does it Matter? *Long Range Planning* **45**(4): 277-298
- Weick KE. 1976. Educational Organizations as Loosely Coupled Systems. *Administrative Science Quarterly* **21**(1): 1-19
- Weick KE. 1989. Theory Construction as Disciplined Imagination. *Academy of Management Review* **14**(4): 516-531
- Weick KE, Sutcliffe KM, Obstfeld D. 1999. Organizing for high reliability: Processes of collective mindfulness. In B Staw, R Sutton (Eds.), *Research in Organizational Behavior*: 81-123. JAI Press: Greenwich, CT
- Witt MA, Lewin AY. 2007. Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies* **38**(4): 579-594
- Yin RK. 2009. *Case Study Research: Design and Methods* (5 ed.). Sage: Thousand Oaks, CA
- Zeng J, Simpson C, Dang B-L. 2017. A Process Model of Dynamic Capability Development: Evidence from the Chinese Manufacturing Sector. *Management and Organization Review* **13**(3): 643-673
- Zott C, Amit R. 2007. Business Model Design and the Performance of Entrepreneurial Firms. *Organization Science* **18**(2): 181-199
- Zott C, Amit R. 2008. The Fit between Product Market Strategy and Business Model: Implications for Firm Performance. *Strategic Management Journal* **29**(1): 1-26



**FIGURES AND TABLES**

**Figure 1: The multidextrous space**



**Table 1: Evolutionary steps in the development of the global BM**

| Year | Location     | BM Disruption | BMI | Practice       | Driver                                 | Explanation                                                                                                                                                                                            | Representative evidence                                                                                                                                                                                                                                                                                                                 |
|------|--------------|---------------|-----|----------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2007 | Sweden       | N             | N   | Divestiture    | Non-core business                      | Gambro Healthcare was divested in June 2007 to funds managed by Bridgepoint.                                                                                                                           | "OneHealth, which operated the Gambro dialysis clinics was deemed non-core" (EQT)                                                                                                                                                                                                                                                       |
| 2011 | Saudi Arabia | N             | N   | Joint Venture  | Growth and Operational efficiency      | JV agreement with a Saudi Arabian Holding Company with major investments in the medical sector including Bupa Arabia.                                                                                  | "aligning operational efficiency and highest medical quality... The knowhow of providing three million treatments to our 19,000 patients goes into every single medical activity." (CEO, President)                                                                                                                                     |
| 2013 | Italy        | N             | N   | Acquisition    | Deregulation and privatization         | Management and care of chronic diseases is experiencing a trend for privatization as private providers are expected to deliver high quality care at a competing price.                                 | "Our aim in Sicily is now to significantly enhance medical outcomes and operational efficiency in these new centres by quickly integrating them to the OneHealth model." (CEO, President)                                                                                                                                               |
| 2013 | Multiple     | N             | N   | Exploitation   | Growth and profitability               | OneHealth receives the "[University] Healthcare BM" award.                                                                                                                                             | "Healthcare is clearly in transition. This creates both challenges and opportunities. With its innovative approach to the future of the dialysis industry, OneHealth has successfully made its mark" (Stephen Chick, INSEAD)                                                                                                            |
| 2014 | China        | N             | N   | Exploitation   | Deregulation and privatization         | The 12th Five-Year Plan of Chinese Healthcare Reform states that the government will further optimize healthcare resources allocation and encourage the establishment of private medical institutions. | "Reform of China's healthcare system to control cost growth for payers and patients, while still improving quality, is a priority" (SVP)                                                                                                                                                                                                |
| 2015 | Multiple     | Y             | Y   | Exploration    | Consolidation of distributed expertise | OneHealth launches its e-learning platform Medicate to couple its research activities with its medical quality system.                                                                                 | "As a product-independent provider, our staff is our key asset. Providing the best education to them as well as to our patients, nurses and management will further improve the quality of life of our patients" (Chief Medical Officer)                                                                                                |
| 2016 | China        | N             | N   | JV             | Market entry barrier                   | Entry criteria 70/30 partnership with local firm, hence JV with Chinese state-owned conglomerate YG                                                                                                    | "The plan is to establish a nationwide network of dialysis centres that fill the current supply and quality gap in China... The JV partnership aims to provide patients with Swedish and European high standards of renal care that is covered by Chinese public reimbursement schemes to make the service affordable." (Legal Adviser) |
| 2016 | Turkey       | Y             | N   | Divestiture    | BM failure                             | Ambiguous industry standards, highly deregulated market with low entry barriers.                                                                                                                       | "The market was just too chaotic, anyone could enter and run a clinic as they wish, standards were too poor, and doctors could easily buy themselves licences and customers." (SVP)                                                                                                                                                     |
| 2017 | China        | Y             | N   | Divestiture    | BM failure                             | BM decoupled from ordinary system and no coherence with ordinary BM logic.                                                                                                                             | "Already after 6 months OneHealth requested for the JV to be terminated due to misaligned views on how to manage and operate the JV" (SVP)                                                                                                                                                                                              |
| 2017 | China        | Y             | Y   | Multidexterity | Profit pressure from owners            | Following the Chinese JV failure in 2016, the owners wanted to see their investment loss being corrected a.s.a.p.                                                                                      | "The current owners (Bridgepoint) are... anxious to get a "proof point" of China actually breaking even, which is the reason we have adopted a somewhat unorthodox approach to go for both PPT platforms and independent clinic businesses when entering the market." (SVP)                                                             |

**Table 2: Multidextrous BMI in transforming economies**

| Dominant practice                         | Resource Integration                                                                                                                                                                                                          | Skunkworks                                                                                                                                         | Resource Partitioning                                                                                                                                                                                                                                                  | Resource Orchestration                                                                                                                                                                                                       |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>BM</i>                                 | Global BM <sub>1</sub>                                                                                                                                                                                                        | Local BM <sub>2</sub> (PPT)                                                                                                                        | Local BM <sub>3</sub> (PPT+)                                                                                                                                                                                                                                           | Local BM <sub>4</sub> (PPT++)                                                                                                                                                                                                |
| <i>Type of market*</i>                    | Developing-Developed                                                                                                                                                                                                          | Transitioning-Developing                                                                                                                           | Transitioning-Developing                                                                                                                                                                                                                                               | Transitioning-Developing                                                                                                                                                                                                     |
| <i>Type of regulatory regime</i>          | Centralized                                                                                                                                                                                                                   | Decentralized                                                                                                                                      | Decentralized                                                                                                                                                                                                                                                          | Decentralized                                                                                                                                                                                                                |
| <i>Local industry standards ambiguity</i> | Low                                                                                                                                                                                                                           | Moderate-High                                                                                                                                      | Opaque                                                                                                                                                                                                                                                                 | Moderate-High                                                                                                                                                                                                                |
| <i>Level of resource coupling</i>         | Moderate                                                                                                                                                                                                                      | Loose                                                                                                                                              | Loose                                                                                                                                                                                                                                                                  | Tight                                                                                                                                                                                                                        |
| <i>Degree of structural coherence</i>     | Moderate                                                                                                                                                                                                                      | Weak                                                                                                                                               | Strong                                                                                                                                                                                                                                                                 | Weak                                                                                                                                                                                                                         |
| <i>BM localisation</i>                    | Moderate                                                                                                                                                                                                                      | High                                                                                                                                               | High                                                                                                                                                                                                                                                                   | Moderate                                                                                                                                                                                                                     |
| <i>Main objective</i>                     | Speeding up multinationalisation                                                                                                                                                                                              | Developing new performance metrics                                                                                                                 | Leveraging local regulations                                                                                                                                                                                                                                           | Leveraging slack resources                                                                                                                                                                                                   |
| <i>Mechanisms</i>                         | Resource ownership; Service integration; Technological nesting                                                                                                                                                                | Service disintegration; Decoupling ownership                                                                                                       | Service augmentation; Technology refitting                                                                                                                                                                                                                             | Distributing ownership; Service retrofitting                                                                                                                                                                                 |
| <i>BM adaptation/adoption</i>             | Localisation of global BM through minor adaptations                                                                                                                                                                           | - Disintegrating service integration<br>- Decoupling ownership                                                                                     | - Augmenting service integration<br>- Refitting technological nesting                                                                                                                                                                                                  | - Distributing ownership<br>- Retrofitting service integration                                                                                                                                                               |
| <i>Representative example</i>             | Saudi Arabia: "OneHealth will also continue to invest in localising the renal care service by training Saudi Arabian nurses in the field of dialysis through its Medicate in Riyadh, Saudi Arabia." (Press release, Jan 2019) | China: "It's an unconventional model that does not fit the rest. It will remain a rather separate business until its success can be proven." (SVP) | China: Platform acquisitions of product distribution firms serve as vehicles for clinic greenfield operations. In this way, OneHealth partitions the market locally by finding a niche that is poorly addressed by the significantly larger international competitors. | China: "We have received board approval for a similar (but smaller) acquisition in [City], starting due diligence next week; in parallel we are already applying for clinic licenses in certain surrounding locations" (SVP) |

\* Based on UN/WESP 2019 Country classification