Journal of Business Models, Vol. 12, No. 3, pp. 42-52

JOURNAL OF BUSINESS MODELS

Managing the Dual Business Model Trade-off in Multinational Corporations

Authors

Sergei Mozheiko[1] & Kristian J. Sund[2]

Abstract

When a multinational operates different business models in different markets, a trade-off typically exists between local-market adaptations and cross-market economies of scale and scope. How do country managers navigate these trade-offs and the tensions inherent in developing and operating such dual business models? In this short paper we explore how a local subsidiary can innovate its business model in a way that creates alignment with the local market while respecting the larger corporate structure. We study the Chinese subsidiary of Velux, a multinational window manufacturer, that has transformed its business model from simple production to engineering, and further to modular solutions. We show that by respecting both the corporate strategic mission and the corporate culture, in combination with avoiding any direct challenge to the core corporate business model, the subsidiary has bypassed the tensions commonly observed with dual business models.

Keywords business model innovation, multinational corporation, dual business models

[1] Roskilde University & Sino-Danish College, University of Chinese Academy of Sciences, sergeimo@ruc.dk
[2] Roskilde University, sund@ruc.dk

Please cite this paper as: Mozheiko, S. & Sund, K. J. (2024). Managing the Dual Business Model Trade-off in Multinational Corporations, *Journal of Business Models*, Vol. 12, No. 3, pp. 42-52.

1. Introduction and theoretical background

For multinationals with a small home market, entry into new national markets can be the means to realize economies of scale (Eckert et al., 2022). Local adaptation and corporate integration are two forces that influence the subsidiary's strategic choices in multinational corporations (Grewal et al., 2018; Lei et al., 2017). When local-market realities and the dominant corporate logic of value creation and appropriation grow apart, it undermines the viability of the subsidiary (Chesbrough and Rosenbloom, 2002). This divergence is especially salient in multinational corporations that compete in multiple heterogenous markets, necessitating differential response to market dynamics and accordant local adaptations of their business model (BM) (Bartlett and Ghoshal, 1998; Chesbrough and Rosenbloom, 2002; Markides, 2013). Such adaptation demands a loosely coupled system with differentiated elements that are sensitive to local environmental variation, yet sufficiently integrated under one corporatewide structure to generate economies of scale and scope (Frankenberger and Zott, 2018; Weick, 1976). How local top managers experience and navigate the two opposing forces of local adaptation and corporate integration in their business modeling is what we explore in this short paper.

Becoming aware of, or "sensing", the need for change is a prerequisite for the initiation of business model innovation (BMI) activities (Best et al., 2021; Jensen and Sund, 2017; Teece, 2018). This awareness is most acute when top management perceive competitive and environmental threats that could put the organization at risk (Sund & Lindskov, 2022; Lindskov et al, 2023; Saebi et al., 2017; Sund, 2013). Yet, the ability to perceive market realities is not evenly spread across the corporate structure, not least due to differentiated access to information and knowledge (Egfjord and Sund, 2020; Sund, 2024). Recognition of contingencies is least distorted in boundary roles at an immediate interface with their environment (Aldrich and Herker, 1977; Cohen and Levinthal, 1990). Thus, the locally embedded management of a subsidiary may be in the best position to steer that subsidiary's autonomous strategic development and business modeling, bypassing the corporate dominant logic, to be explorative and responsive to realities of its respective markets (Burgelman, 1983; Christensen and Raynor, 2013; Sund et al., 2014). This builds up the corporation's requisite variety to counter environmental variety (Ashby, 1979; Burgelman, 1983), and allows the subsidiary to tap into the latent potential of any opportunity it attempts to monetize (Chesbrough and Rosenbloom, 2002). However, corporate authorization may be needed. Especially in cases with radical, architectural BMI, selling issues to top management may be a challenge (Sund et al., 2021).

Radical novelty is often best cultivated in isolation from currently exercised exploitation (Donada et al., 2021). However, subsequently implementing innovative solutions generated in siloed units may lead to clashes with prevailing routines, processes, and values. One way corporations deal with this is by structurally separating new BMs from the old, turning them into autonomous business units (Chesbrough and Rosenbloom, 2002; Christensen and Raynor, 2013; Donada et al., 2021). Yet, such separation may hinder the benefits of integration. There is thus a trade-off between local-market adaptation and cross-market economies of scale and scope. Furthermore, even if dual

BMs are structurally separated under one corporate parent, they may end up competing with each other for customers or resource allocations (Egfjord and Sund, 2020; Markides and Charitou, 2004; Sund et al., 2016; Sund et al., 2021). Conversely, if the dual BMs are not separated, high levels of interdependence may also create structural conflicts (Berends et al., 2016; Sund et al., 2016), and efficient resource orchestration may be sabotaged by incompatible assets (Kim and Min, 2015).

Despite the frictions that often occur between dual BMs, there are examples of firms successfully managing to implement parallel models with neutral or complementary effects vis-à-vis each other. For example, geographical separation has allowed Nestlé to successfully establish a business unit with a disparate Nespresso BM, without cannibalizing its customer base (Markides and Charitou, 2004). Another example is Documentum, a business unit of Xerox, which, having access to its parent's sales channels, was able to capitalize on a latent opportunity without undermining Xerox's business, allowing the latter to appropriate significant value from the technology (Chesbrough and Rosenbloom, 2002). Aside from identifying a small number of success cases, limited research has been dedicated to identifying specific factors that local management would perceive could facilitate architectural BMI in a multinational subsidiary, when the differences between the local and the home markets are significant, and sensitivity to local-market variation is vital. We explore this question through the case of a Danish multinational firm in the building industry, to identify what enabled successful architectural BMI in its Chinese subsidiary. By answering the research question "How might tensions between local adaptation and corporate integration in pursuit of architectural BMI in foreign business units be mitigated?" we attend to a gap in the dual BM literature. Our findings focus attention on the experiences of local top management, to help establish what factors should be considered when developing dual BM theories in the context of multinationals. Our findings can also help practitioners understand how to overcome the organizational dilemma by which local business units must differentiate their BMs yet do so within the boundaries imposed by the corporate mission and in such a way that corporate knowledge remains utilizable.

2. Methods

To explore our research question, we studied the case of Velux Group – a multinational supplier of the building industry. The case method was selected for its capacity to explore and explain in depth a particular revelatory phenomenon (Patton, 2015; Yin, 2018). The case company was purposefully selected as it operates dual BMs; it is therefore directly opportune for answering the set research question. We conducted five detailed semi-structured interviews, two each with the CEO and the senior strategy consultant, and one with the senior design director, all of whom are part of the Chinese subsidiary of Velux Group. This data amounts to 291 minutes of interviews and 22,250 words of verbatim transcription. The interviews were designed to reveal the motivations for BMI, the process of BM change, and relations and outcomes for both the corporation and the subsidiary.

The semi-structured approach aimed at revealing the perceptions of the respondents. To analyze the data, the transcribed text was first coded independently by the two authors. We coded for BM differences between subsidiary and parent, for motivations, and for elements of intraorganizational tension and conflict. Using a thematic analysis grid

(Saunders et al., 2019), we arranged codes and themes in columns, and their corresponding sources in rows. We discussed the resulting themes looking for corresponding and diverging interpretations, and such categorization of data allowed us to derive our key findings. The case description and analysis were complemented with secondary data including annual reports, statements, and the official website of the company.

3. Case description

Velux Group is a company under VKR Holding, a holding company owned by the Kann Rasmussen family and Villum Foundation, with controlling influence belonging to the former. As of 2021, the holding company had 19,900 employees throughout 38 countries, with manufacturing facilities in 11 countries, including China. The Velux corporate BM involves selling roof windows and skylights, mainly for residential buildings, for installation in attics and sloped rooftops. For the past decade, a change of strategy has led VKR Holding to build a position in the commercial (nonresidential) market as well, mainly fueled by a series of acquisitions. The Group defines that its corporate mission is to deliver daylight, fresh air, and an overall better environment to households and commercial premises through the production and supply of rooftop windows. Velux China CO., Ltd. is a subsidiary of Velux Group. In the aftermath of its entry into the Chinese market 25 years ago, Velux China has undergone a series of structural and BM changes. The entry into the market was prompted by a seemingly high potential based on the construction per square meter in the country.

Confronted by a strikingly different Chinese market, with high-rise buildings devoid of attics and sloped rooftops dominating the urban architectural landscape, Velux China faced a smaller demand for its products than originally anticipated. Market entry also attracted interest from local companies who produced cheaper copies of the Velux rooftop windows for the European market, creating a challenge for the company's business back home. It was gradually recognized by local management that there was a need to explore new products and BMs. The CEO told us: *"We have to do local innovation to ensure development of new products, solutions, technology or business models and not only following the Group and using what they have."* In large part, the awareness of the need for BMI was born out of necessity. The CEO commented that *"In the first 20 years we were really struggling, and a number of times almost died in the Chinese market."*

Over time, the subsidiary has gradually replaced expat employees with local employees, and currently employs a local subsidiary CEO with a better understanding of the Chinese market. Prior to assuming the executive role, this individual had worked in various roles at Velux from the early days of its entry into the Chinese market and possessed an entrepreneurial background. With extensive familiarity with both the company's corporate mission and the local market and business culture, he initiated a series of BM changes. Firstly, the focus shifted from residential to commercial buildings. Secondly, instead of Velux products being used as originally intended (as rooftop windows), they were adapted for use in basements. Installed in a near horizontal slope on the ground level, this ersatz solution provided fresh air and daylight to basement premises. Thirdly, windows were upgraded with remote controls, rain sensors, and Internet of Things (IoT) solutions, subsequently offering greater profit margins. Finally, local management has been exploring servitization models that would allow greater customer embeddedness as it commits them to long-term operational expenditures (Storbacka et al., 2013).

A trend in China of high-rise constructions with vertical windows made the traditional Velux products incompatible for new sites, including in basements. Windows now had to be vertical, and although the parent firm does include business units that manufacture vertical windows in-house, it was economically more viable for Velux China to outsource production to local original equipment manufacturers (OEMs), to deliver customized and complex solutions quickly through modular design. This approach of a manufacturing firm with extensive capabilities shifting its focus to become a solution provider while outsourcing component production has prior examples (Rajala et al., 2019). This radical change of its BM, initiated a few years prior to COVID-19, was very profitable for Velux China. Whereas the parent firm continues to be predominantly focused on the residential market, in China revenue is now based around 80% on the commercial market. While the parent company delivers rooftop products produced in-house, the Chinese business unit now delivers building engineering and smart basement solutions in close partnership with third-party services, and outsourcing production to OEMs. The case of Velux shows that dual, architecturally different BMs can coexist under the auspices of one corporation. Our study divulged a number of factors that may have facilitated BM changes in the Chinese subsidiary.

4. Key findings

4.1 Decision-making autonomy and local-market awareness

Business model exploration in the context of Velux China can be described as a careful balancing act of handling the dilemmas of respecting the dominant logic linked to a corporate BM, while developing a new and more local-market-appropriate one. This dilemma may be particularly pronounced when the corporate BM is highly successful in other markets. As the CEO told us: *“We [would want to] try a lot of new things, but the Group believes that the business [in China] should run as they think. They are nervous about taking a risk and making a mistake because they are too successful.”*

The first BMI-enabling factor that we identified in our study was the move from expat management to local management, as previously alluded to. This move was accompanied by a degree of decentralization, i.e., local decision-making autonomy. The dominant logic of the corporate BM can thus be bypassed if extensive autonomy is granted to a local manager and employees who are better versed in navigating the unique business scenery and have better understanding of the local culture. Thus, BMI in an autonomous business unit can be mediated by a locally embedded manager acting as an intrapreneur.

“Culture is one of the key issues [...] no one in Denmark could know China better than the local. So, we must use local people and local leader to manage business. [...] We got a lot of freedom, and we don't need to follow everything from the Group. This also very much depends on trust. They trust that my foremost concern is to help the company grow, and that I want to develop new successful ideas. They just give me a wide framework and let me “play around.” My most important role is to keep them understand [why we

implemented changes] to keep their support. The best support they can provide is – not intervening." (CEO, Velux China)

On the other hand, as shown in prior research, if exploration is prompted predominantly by market cues and without consideration of the parent's value chain, the end results may be structural misfit and friction between the two BMs (Sund et al., 2016). Asymmetric focus in BMI, whether exclusively on market circumstances or exclusively on corporate practices, would have an adverse impact at the output. Velux China has approached BMI with consideration of both local and corporate needs. The CEO of Velux China had the capabilities to balance these two aspects due to his extensive familiarity with both the local culture and market and the corporate mission. These capabilities allowed him to identify latent demand for the product, while having the authority to act independently enabled him to execute the shift in focus from installing windows on sloped rooftops, which are virtually non-existent in China, to installing them at ground level to deliver fresh air and light to basement premises. Freedom to act without having to constantly request authorization appears to facilitate a prompt response from local managers to market circumstances.

4.2 Not challenging the corporate mission and culture

Local management was very careful to make BM changes that would not move the subsidiary away from the corporate mission, or challenge the corporate values. The subsidiary still focuses on the corporate purpose and mission of delivering daylight, fresh air, and an overall better environment to households and commercial premises. In terms of values, the CEO told us: *"[...] we must ensure that we behave as a model company and follow our principles, values and [ethical] commercial behavior."* The CEO identified similarities between the corporate culture of the Danish company and traditional rural Chinese culture. Reflecting on these, he told us: "*[Here is a] family-oriented culture; people respect, trust and support each other, and they also understand that the collective is more important than the individual*."

More than 25 years working for the company imprinted the local CEO with corporate values and tied the local unit to the organization's core mission. In this way it set boundaries to ensure that the BMI of Velux China did not take place at the expense of the corporate purpose and culture; rather, it happened within it. It thus appears that reciprocal values generate trust toward local intrapreneurs and arguably incline corporations to grant greater autonomy to local management.

4.3 Not challenging the existing business model

Velux China continues to sell the original products of the corporate parent, even if these today represent a smaller proportion of revenues. Adapted BMs were the result of many years of trial-and-error experimentation and appear to be either neutral or complementary to the original. Thus, they do not challenge directly the original corporate BM. According to the CEO it took 15 years to build a business around basement windows, and for the first "*10 years [we sold] our own Velux windows. Some to the basements, some to the roof.*" They then went on to develop specific products for this segment, outsourcing the actual manufacturing to a local external manufacturer, which was a novel way of working for the company, representing a major business model change for this product line. As the CEO told us, "*Velux in other countries never outsources to OEM partners. We are the first ones.*"

Conflicts between dual BMs are often the result of inconsistencies between resources, capabilities, and supply and value chains, and managers need to decide which functions must be integrated and which separated between BMs (Dutta, 2022). For Velux China, the original use of the same product in different applications meant that existing supply chains and channels were utilized, but their use in an innovative way ensured they met the needs of the local market. Later the business model of one product line was changed, but such BMI did not contradict the incumbent BM of the corporate parent and did not compete for resource allocation. Equally, there was no cannibalization of any existing customer base as the new BM did not substitute the old but rather addressed newly identified revenue streams.

4.4 Leveraging corporate capabilities

Eventually, as Velux China had to adapt to local architectural trends, they began outsourcing production to OEMs. Some of their products were now different from the ones manufactured in-house by Velux, although they were still within the scope of the corporate capabilities and aimed at fulfilling the corporate mission. Extensive corporate knowledge of rooftop solutions and modular design was still at their disposal. Although a radically different market exposed incompatibilities between Velux's original in-house products and Chinese architecture, existing corporate capabilities, such as the brand and the know-how, proved critical to delivering inimitable engineering solutions by identifying capable OEMs and controlling for quality throughout the entire installation process. Innovating the BM within the scope of corporate know-how ensured competitive advantage in the local market:

"The key – is our knowledge. We can engineer unique solutions for customers. For that we have the knowledge and capability. The other [local Chinese] companies – they can copy our product, copy our idea, but once they do – in a year they will run into problems with bad insulation and leakage." (CEO, Velux China)

This suggests that if a local subsidiary leverages corporate know-how when it innovates its BM, it can remain locally responsive, while not disconnecting from the capabilities of the larger organization. Such a transformation from being a building material provider to being a building engineering company handling the entire installation process and servitization meant that Velux China was now operating under distinct BMs that were not in conflict vis-à-vis its corporate parent. Extensive experience and long tenure in Velux ensured that the local manager knew how to engage in BMI without isolating the foreign subsidiary from leveraging existing corporate capabilities.

5. Concluding discussion

Our findings add to the literature stream on dual BMs and BMI. We identify factors discussed by local subsidiary managers as important in balancing the two forces of corporate integration and local adaptation. Firstly, we find that the corporate parent will be more willing to grant autonomy to a local executive if the subsidiary's BMI respects the dominant corporate purpose and mission. In our case company, local Chinese management embraced the corporate mission and made efforts to experiment with new products and BM changes that would continue to be aligned with this mission. By avoiding inconsistencies vis-à-vis the existing BM of the parent, mission drift is prevented, and corporate capabilities can still be leveraged under the new local BM, even if this is tailored to a particular foreign market. Secondly, we find that the same is true for the values linked to the corporate culture. In our case company, local management made efforts to both personally embrace and openly paint similarities between corporate values and those of traditional Chinese society. Thirdly, we find that local BMI is easier when new BMs are neutral or complementary to the corporate one, and do not represent a substitution threat, confirming findings in several other recent studies (e.g., Sund et al., 2016; Sund et al., 2021).

Our findings are summarized in Figure 1. The local CEO, given some degree of autonomy, is at the same time the receptor, the regulator, and the effector of the subsidiary, and tries to steer the BMI to align with both the corporate mission and the local-market context. The subsidiary engages in trial-and-error BM exploration, leveraging corporate capabilities, but under constraints imposed by the corporate mission and culture. The aim is to develop additional neutral or complementary BMs that will be successful in the local market, while avoiding any substitution effect on the existing BM and associated products. In this loosely coupled form of organized BMI, the local CEO, having internalized a deep understanding of the external market, the internal structure, and the Group's mission, facilitates innovation while maintaining the subsidiary's viability through both corporate expediency and local adaptation.

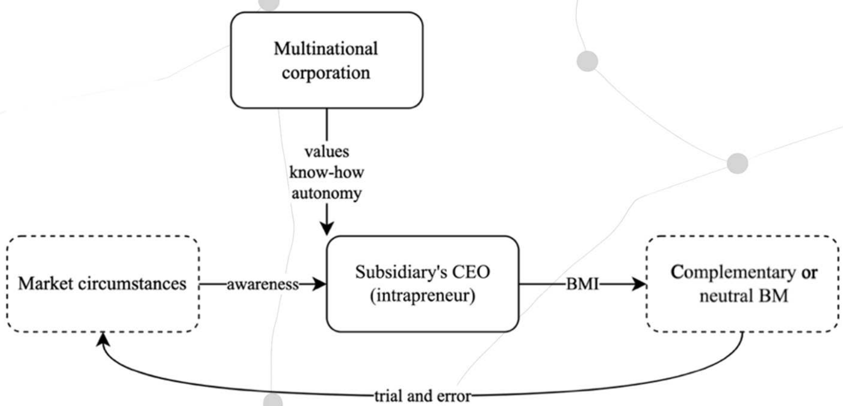

Figure 1. An illustration of the context of neutral subsidiary BMI

Extant literature has repeatedly noted the difficulty of operating under dual BMs due to mutual incompatibilities (Markides, 2013; Markides and Charitou, 2004; Visnjic et al., 2022), yet market idiosyncrasies compel multinational corporations to do just that if they wish to maintain their presence in foreign markets. While how tensions can be identified and managed has been researched (Visnjic et al., 2022) and it has been suggested that a holistic view of the organization is necessary for leaders to do this successfully (Smith et al., 2010), few studies have examined what contributes to successful BMI in foreign business units from the perspective of the narratives of local management. We have shown that instilled with both corporate values and extensive knowledge of the local market, intrapreneurs can possess the necessary capabilities to efficiently manage the trade-offs observed between integration and differentiation of BMs in the multinational context.

Our study shows how the tensions of dual BMs in multinational corporations, as a cause of heterogeneity between markets, can be moderated by employing local management and providing autonomy, while respecting corporate strategic mission, values, and BMs. In this context, local management plays a key role in balancing the dual goals of local-market adaptation and corporate integration. The extent to which these findings can be generalized to other contexts, such as larger or smaller firms, other national markets and cultures, or other industries, of course remains to be verified. However, in general terms, we add to examples of successful radical BMI previously documented in literature (e.g., Chesbrough and Rosenbloom, 2002; Markides and Charitou, 2004). We illustrate how local managers may be better at sensing the need for BMI activities (Best et al., 2021; Egfjord and Sund, 2020; Jensen and Sund, 2017; Teece, 2018). Finally, we add to the emergent literature focused on the tensions involved in BMI (Sund et al., 2016; Sund et al., 2021).

For practitioners, this study suggests that corporate management should consider recruiting inside the subsidiary local management who are knowledgeable of the local market and allow these to familiarize themselves gradually with the corporate purpose, mission, and values. They should grant autonomy to local managers to engage in BMI, as long as new local BMs support, or at least do not interfere with, the dominant corporate BM.

References

Aldrich, H. & Herker, D. (1977), Boundary spanning roles and organization structure, *Academy of Management Review*, Vol. 2, No. 2, pp. 217–230. https://doi.org/10.5465/amr.1977.4409044

Ashby, W. R. (1979), *An Introduction to Cybernetics* (6th ed.), Chapman & Hall, London.

Bartlett, C. A. & Ghoshal, S. (1998), *Managing Across Borders: The Transnational Solution* (2nd ed.), Harvard Business School Press, Cambridge, MA.

Berends, H., Smits, A., Reymen, I. & Podoynitsyna, K. (2016), Learning while (re)configuring: Business model innovation processes in established firms, *Strategic Organization*, Vol. 14, No. 3, pp. 181–219. https://doi.org/10.1177/1476127016632758

Best, B., Miller, K., McAdam, R. & Moffett, S. (2021), Mission or margin? Using dynamic capabilities to manage tensions in social purpose organisations' business model innovation, *Journal of Business Research*, Vol. 125, pp. 643–657. https://doi.org/10.1016/j.jbusres.2020.01.068

Burgelman, R. A. (1983), Corporate entrepreneurship and strategic management: Insights from a process study, *Management Science*, Vol. 29, No. 12, pp. 1349–1364. https://doi.org/10.1287/mnsc.29.12.1349

Chesbrough, H. & Rosenbloom, S. (2002), The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies, *Industrial and Corporate Change*, Vol. 11, No. 3, pp. 529–555. https://doi.org/10.1093/icc/11.3.529

Christensen, C. M. & Raynor, M. E. (2013), *The Innovator's Solution: Creating and Sustaining Successful Growth*, Harvard Business Review Press, Boston, MA.

Cohen, W. M. & Levinthal, D. A. (1990), Absorptive capacity: A new perspective on learning and innovation, *Administrative Science Quarterly*, Vol. 35, No. 1, pp. 128–152. https://doi.org/10.2307/2393553

Donada, C., Mothe, C. & Alegre, J. (2021), Managing skunkworks to achieve ambidexterity: The Robinson Crusoe effect, *European Management Journal*, Vol. 39, No. 2, pp. 214–225. https://doi.org/10.1016/j.emj.2020.07.008

Dutta, S. (2022), Emerging market firms and dual business models: An Indian perspective, *Journal of Business Models*, Vol. 10, No. 2, pp. 83–94. https://doi.org/10.54337/jbm.v10i2.6966

Eckert, S., Koppe, M., Burkatzki, E., Eichentopf, S. & Scharf, C. (2022), Economies of scale: The rationale behind the multinationality-performance enigma, *Management International Review*, Vol. 62, No. 5, pp. 681–710. https://doi.org/10.1007/s11575-022-00473-2

Egfjord, K. F.-H. & Sund, K. J. (2020), Do you see what I see? How differing perceptions of the environment can hinder radical business model innovation, *Technological Forecasting and Social Change*, Vol. 150, 119787. https://doi.org/10.1016/j.techfore.2019.119787

Frankenberger, K. & Zott, C. (2018), The role of differentiation, integration, and governance in developing innovative business models, *Academy of Management Proceedings*, Vol. 2018, No. 1, 18658. https://doi.org/10.5465/AMBPP.2018.18658abstract

Grewal, R., Saini, A., Kumar, A., Dwyer, F. R. & Dahlstrom, R. (2018), Marketing channel management by multinational corporations in foreign markets, *Journal of Marketing*, Vol. 82, No. 4, pp. 49–69. https://doi.org/10.1509/jm.16.0335

Jensen, H. & Sund, K. J. (2017), The journey of business model innovation in media agencies: Towards a three-stage process model, *Journal of Media Business Studies*, Vol. 14, No. 4, pp. 282–298. https://doi.org/10.1080/16522354.2018.1445158

Kim, S. K. & Min, S. (2015), Business model innovation performance: When does adding a new business model benefit an incumbent? *Strategic Entrepreneurship Journal*, Vol. 9, No. 1, pp. 34–57. https://doi.org/10.1002/sej.1193

Lei, L., Voss, H., Clegg, L. J. & Wu, X. (2017), Climate change strategies of multinational enterprises in China, *Journal of Cleaner Production*, Vol. 160, pp. 98–108. https://doi.org/10.1016/j.jclepro.2017.03.150

Lindskov, A., Sund, K. J., Dreyer, J. K., & Yu, J. (2023), The regional and temporal nature of hypercompetition, *Long Range Planning*, Vol. 56, No. 4, 102328. https://doi.org/10.1016/j.lrp.2023.102328

Markides, C. C. (2013), Business model innovation: What can the ambidexterity literature teach us? *Academy of Management Perspectives*, Vol. 27, No. 4, pp. 313–323. https://doi.org/10.5465/amp.2012.0172

Markides, C. C. & Charitou, C. D. (2004), Competing with dual business models: A contingency approach, *Academy of Management Perspectives*, Vol. 18, No. 3, pp. 22–36. https://doi.org/10.5465/ame.2004.14776164

Patton, M. Q. (2002), *Qualitative Research and Evaluation Methods* (3rd ed.), Sage Publications, Thousand Oaks, CA.

Rajala, R., Brax, S. A., Virtanen, A. & Salonen, A. (2019), The next phase in servitization: Transforming integrated solutions into modular solutions, *International Journal of Operations & Production Management*, Vol. 39, No. 5, pp. 630–657. https://doi.org/10.1108/IJOPM-04-2018-0195

Saebi, T., Lien, L. & Foss, N. J. (2017), What drives business model adaptation? The impact of opportunities, threats and strategic orientation, *Long Range Planning*, Vol. 50, No. 5, pp. 567–581. https://doi.org/10.1016/j.lrp.2016.06.006

Saunders, M. N. K., Lewis, P. & Thornhill, A. (2019), *Research Methods for Business Students*, (8th ed.), Pearson, New York, NY.

Smith, W. K., Binns, A., & Tushman, M. L. (2010), Complex business models: Managing strategic paradoxes simultaneously. *Long Range Planning*, Vol. 43, No. 2–3, pp. 448–461. https://doi.org/10.1016/j.lrp.2009.12.003

Storbacka, K., Windahl, C., Nenonen, S. & Salonen, A. (2013), Solution business models: Transformation along four continua, *Industrial Marketing Management*, Vol. 42, No. 5, pp. 705–716. https://doi.org/10.1016/j.indmarman.2013.05.008

Sund, K. J. (2013), Scanning, perceived uncertainty, and the interpretation of trends: A study of hotel directors' interpretation of demographic change, *International Journal of Hospitality Management*, vol. 33, June, pp. 294–303. https://doi.org/10.1016/j.ijhm.2012.09.005

Sund, K. J. (2024), *Cognition and Business Models: from Concept to Innovation*, Palgrave Macmillan.

Sund, K. J., Bogers, M. & Sahramaa, M. (2021), Managing business model exploration in incumbent firms: A case study of innovation labs in European banks, *Journal of Business Research*, Vol. 128, pp. 11–19. https://doi.org/10.1016/j.jbusres.2021.01.059

Sund, K. J., Bogers, M., Villarroel, J. A. & Foss, N. J. (2016), Managing tensions between new and existing business models, *MIT Sloan Management Review*, Vol. 57, No. 4, pp. 8–10.

Sund, K. J., Villarroel, J. A. & Bogers, M. (2014), Organizational aspects of business model innovation: The case of the European postal industry, *Academy of Management Proceedings*, Vol. 2014, No. 1, 11099. https://doi.org/10.5465/ambpp.2014.126

Sund, K. J., & Lindskov, A. (2022), Incumbent Business Model Innovation Under Misperceived Hypercompetition, *Journal of Business Models*, Vol. 10, No. 1, pp. 11–18. https://doi.org/10.54337/jbm.v10i1.6825

Teece, D. J. (2018), Business models and dynamic capabilities, *Long Range Planning*, Vol. 51, No. 1, pp. 40–49. https://doi.org/10.1016/j.lrp.2017.06.007

Visnjic, I., Jovanovic, M. & Raisch, S. (2022), Managing the transition to a dual business model: Tradeoff, paradox, and routinized practices, *Organization Science*, Vol. 33, No. 5, pp. 1964–1989. https://doi.org/10.1287/orsc.2021.1519

Weick, K. E. (1976), Educational organizations as loosely coupled systems, *Administrative Science Quarterly*, Vol. 21, No. 1, pp. 1–19. https://doi.org/10.2307/2391875

Yin, R.K. (2018), *Case study research and applications: design and methods* (6th ed.), Sage publications, Los Angeles, CA.

Acknowledgements

This study was supported by the Sino-Danish Center for Education and Research. An earlier version of this paper was presented at the 2023 Business Model Conference.