

# Chapter 5

## Living With Transformations of International Opportunities: Drivers of Business Model Change in Global Value Chains

**Pia Hurmelinna-Laukkanen**

*Business School, University of Oulu, Finland*

**Tuija Mainela**

*Business School, University of Oulu, Finland*

**Vesa Puhakka**

 <https://orcid.org/0000-0001-5797-1148>

*Business School, University of Oulu, Finland*

### ABSTRACT

*This study addresses the question of how organizations, as parts of global value chains, may respond to, and in some situations initiate, transformations of international opportunities and how that is related to the business model change. It examines the forms of international opportunities and argues that different sources of transformation affect the viability of these opportunities, thereby driving the ways in which organizations live with these transformations. These, in turn, connect to the changes in the firms' business models through 1) transformation intensifying, 2) transformation utilizing, 3) shifting, and 4) exit activities. It suggests that patterns can be detected regarding the alignment of the present manifestation of the international opportunity, the transformation type that influences it, and the ways in which these situations are met. The chapter develops a framework that advances understanding the connectedness of opportunities, business models, and global value chains in the era of discontinuities.*

### INTRODUCTION

Discontinuities characterize the contemporary international business environment (McKinley, 2022),

DOI: 10.4018/978-1-6684-4895-3.ch005

where digitalization, sustainability requirements, and other technological, social, and political developments introduce varying changes to how firms operate (Parida et al., 2019). For example, whereas offshoring to China once was a lucrative alternative, reshoring and re-internationalizing now occur in different forms (Ellram et al., 2013; Sort et al., 2021) together with the search for innovative and flexible business model designs (Brozovic, 2018; Sort & Turcan, 2019). The purposive search for flexibility in international business has been captured in discussions on global factories (Buckley & Ghauri, 2004; Buckley & Strange, 2015) that describe managers' efforts to utilize optimal locations for their firms' specific activities. The firms' own actions play a notable role in the changes, not least because their R&D and innovation activities increasingly spread to different networks and ecosystems in varying locations, thereby giving a start to new, sometimes path-breaking developments across global value chains (e.g., Dedrick et al., 2010; Di Minin & Bianchi, 2011; Van Assche, 2017).

However, the patterns behind the strategic shifts are still not fully understood. Sort and Turcan (2019, p. 39) note that while existing research on business models (BM) extensively describes the business model changes connected to firm growth or disruption, "it is rather scarce on understanding how companies reinvent themselves and their BMs in situations such as de-investing, de-exporting, back-shoring or reshoring." Hence, the considerable variation in response types at the market operation level is seldom covered, and little is known about the business opportunity level changes beneath the market and business model changes. We bring these elements together by examining how international opportunity transformations connect with market operation decisions driving together business model changes.

The changes in the business environment as well as within the firm may trigger planned and unplanned activities (Buckley & Casson, 1998) that involve "transforming the extant world into new possibilities" (Venkataraman et al., 2012, p. 26), thereby initiating new international business opportunities (Alvarez & Barney, 2007; Oviatt & McDougall, 2005). For example, the current technological developments make firms digitalize business functions and redesign their business models to seize new opportunities in the technologically mediated global markets (Hervé et al., 2020). Approaching changes from the opportunity viewpoint, we acknowledge that transformative processes are inherent in the long-term value creation of international firms. The transformative approach emphasizes the possibility of a total lack of connections, other than the history, between old and new opportunities and their relationships with the value-creation contexts (Venkataraman et al., 2012).

While many international business studies address opportunity as a concept, they often leave its meanings and constituencies implicit and open to the reader's interpretation or "define around" the concept by describing the processes that lead to situations where opportunities can be recognized or utilized (see Mainela et al., 2014, for a review). In this study, we see an *opportunity* as a meaningful and favorable alignment of attributes inside and outside a firm (e.g., resources, capabilities, contingency factors), allowing for new business (Adner & Levinthal, 2001; Zahra, 2008). As we are interested in understanding international opportunity transformations concerning the dynamics of the global value chains, we consider that at least some attributes involve crossing national boundaries in terms of transfers of tangibles, intangibles, or networks (Oviatt & McDougall, 2005; Mainela et al., 2014). Consequently, the viability of these opportunities requires desirability in the new markets and the feasibility of the firm's business model in support of cross-border activities. Inspired by the inevitable dynamism in the global value chains (Buckley et al., 2020), we argue that numerous internal and external factors may give rise to more and less rapid and profound opportunity transformations (Venkataraman et al., 2012). The premises on which companies once built their activities change, with some becoming more valuable, even crucial, and others declining in importance or, in the most extreme cases, disappearing. Acknowl-

edging that international opportunities have specific durations defined in terms of the length of action leads to considering how companies address the transformations and manage them in their business models—and raises the question of whether they can be managed. Hence, we suggest that opportunity transformations drive business model changes beyond aspects such as location and ownership of assets, and coordination of supply networks.

To better understand the dynamism of opportunities beneath business model changes in the context of global value chains, we consider how international firms cope with opportunity transformations. More specifically, we focus on the change in an opportunity's attributes, that is, the profound changes in the business premises. We identify factors that define manageability and possible (re)actions to opportunity transformations in terms of the firms' business models. Entrepreneurship literature has a long tradition of addressing these issues, and we build on it intensely. We also draw ideas from innovation and strategic management literature to understand how transformation appears and is embraced. As a result, we develop a broad framework illustrating the drivers of business model change when living with different types of opportunity transformations as they are manifested within and concerning global value chains. We conclude our conceptual study with ideas for future research.

## **'LIVING WITH' OPPORTUNITY TRANSFORMATIONS—DEVELOPING A FRAMEWORK of drivers for business model change**

Business models describing the logic by which firms create and capture value (Teece, 2018) form the basis of firm competitiveness when they are carefully adopted and adapted (Massa et al., 2017; Sohl et al., 2020; Zott & Amit, 2010). Existing research has widely explicated change in business models (see Gassman et al., 2014) as a necessary form of organizational adaptation (McDonald & Eisenhardt, 2020). Digital developments are one of the most notable sources of change needs (Bergamaschi et al., 2021). Building on and extending prior studies, we discuss the opportunity transformations as drivers of the business model change.

### **Sources of Transformation**

A firm has different possibilities to change and reconfigure its business models in global value chains, but the effective response may depend on varying factors (Sort & Turcan, 2019). Business model literature acknowledges predictable, regular environmental change, changing competitive demands, especially in terms of cost-efficiency, and unpredictable environmental shifts with discontinuous changes, to trigger business model change (Wadin & Ode, 2019; Sohl et al., 2020). In global value chains, the different parts are in constant movement (Buckley et al., 2020), which increases the likelihood of dynamics drastically altering the bases of business.

Especially unexpected external events have been noted to serve as the basis for initial opportunities (Hohenthal et al., 2003), and we can also expect them to induce opportunity transformations. Many studies recognize *exogenous changes* in the market, social, or technological structures as sources of international opportunities (e.g., Autio et al., 2000; Dimitratos et al., 2012). As an essential factor, digital developments have introduced many more and less disruptive shifts (Legner et al., 2017). These same changes may cause international opportunities to transform into something else or to disappear (Burt et al., 2002). As Adner and Snow (2010, p. 1655) state: “the emergence of new technology does

## ***Living With Transformations of International Opportunities***

more than just create a substitute threat—it can also reveal significant underlying heterogeneity in the old technology’s broader demand environment. This heterogeneity is a source of opportunities that can support a new position for the old technology, in either the current market or a new one.” On the other hand, *endogenous factors*, such as characteristics, resources, and capabilities of entrepreneurial actors, are considered essential for discovering opportunities, with those entrepreneurial actors possessing the most advanced and current knowledge being typically alert and capable of discovering and exploiting opportunities (Alvarez & Barney, 2007; Foss et al., 2008). Entrepreneurial actors also create (rather than find) opportunities as they construct reality (Fletcher, 2006; Chandler et al., 2011). Hence transformations can have either exogenous or endogenous origins.

The magnitude of the transformation source also matters, ranging from *minor* to *major* changes. Whereas some transformations may originate from (seemingly) small, foreseen issues, such as a firm losing an employee with the needed language skills (Hurmerinta et al., 2015), more far-reaching—even industry-changing—changes also occur. An example could be a change in legislation in the host market that destroys the possibility of offering products to local customers (Kao, 2013). The global value chain needs to be reorganized entirely in such a situation. Simultaneously, the business model is to change in terms of the firm’s value creation and capture logic.

Furthermore, sources of transformation may vary between the *voluntary* and *forced* nature of the situation (see Benito & Welch, 1997; Sort et al., 2021). While in some instances, the firm can willingly make notable course changes or minor correctional moves, in others, it may be forced to do so (see Kao, 2013). Either alternative can result in changes in the global value chain. Behind a reshoring decision, for example, local regulation, quality, or logistics problems in the host market may be unavoidable and necessitate change (Mykhaylenko et al., 2015). In other situations, an organization can see issues such as automation and reputational aspects of the home markets as attractive (Ellram et al., 2013) and return voluntarily.

The origins, magnitude, and situation of the opportunity transformation sources may align in different ways. It is essential to notice that the responses to them are intimately related to the manifestations of the current international opportunities and how those interact with the transformation sources, as discussed next.

## **Manifestations of International Opportunities**

The attributes of international opportunities and their variety are relevant regarding what transforms into something else—and what is then to be addressed in the possible business model changes. Some forms of opportunities involve cross-border resource combinations that create market equilibrium. As they build on market inefficiencies and typically bring together existing supply and demand, they have been characterized as *arbitrage opportunities* (Anokhin et al., 2011; Mainela et al., 2014). Other opportunities build on the development of new ways of operating across (national) borders and on the exploitation of disparate knowledge resulting in innovation, thereby creating disequilibrium in (international) markets (Anokhin et al., 2011; Mainela et al., 2014). *Innovation opportunities* may exhibit *incremental* or *radical* characteristics (e.g., Herrmann et al., 2007), allowing the distinction of three specific categories for manifestations of international opportunities. Regarding digital and other technologies, arbitrage opportunities may involve imitative behavior when fulfilling needs in new markets through technologies already available in other markets. Radical and incremental innovation opportunities rely on novelty for

value creation in terms of building superior technologies by the firm (cf. evolution of technologies in Nelson & Winter, 1982).

Next to the question of what changes in transformation is the question of how it matters. Much of the scholarly debate on international opportunities has centered on the activities of *discovery* versus *creation* (Mainela et al., 2014; George et al., 2016). The former builds on the idea that opportunities are objective and exist in the international markets to be found and recognized (Åkerman, 2015). The creation view sees opportunities as subjective and has put primary weight on entrepreneurs' active generation of opportunities, often in collaboration with others (Fletcher, 2006; Åkerman, 2015).

These activities have also been considered context-bound, with some contexts accommodating discovery rather than creation and vice versa, or processual, with discovery and creation following each other (e.g., Zahra, 2008; Venkataraman et al., 2012). In line with the above notions, exogenous shifts in global value chains and forced institutional changes could provide a chance to find an opportunity. In contrast, the opportunity creation approach could be associated with the endogenous initiation of voluntary changes in global value chains. The process through which the opportunity has been initially formed may have some bearing on the later steps, given path dependencies, for example.

### **Addressing International Opportunity Transformations—"Living with" Changes**

It could be stated, in general, that a manifestation of an opportunity (i.e., the alignment of attributes) can stay the same as long as the attributes remain the same or only change within certain tolerance limits (see Burgelman & Grove, 2007). For example, individual actors within an organization may be replaced without causing too many changes to its capability or resource base, where the same activity can be carried on. However, when many enough or essential enough attributes are replaced, removed, or changed to an adequate degree, the opportunity is lost in its present form.

Zahra (2008) and Mainela et al. (2014) suggest that an opportunity can change from one form to another as time passes. We also acknowledge that the opportunity may disappear completely—that is, there is an end to an opportunity. The question then is whether losing an opportunity can be avoided, if striving for such a preventive approach is necessary or reasonable, and if a possibility exists to proactively prepare for the transformation (see Adner & Snow, 2010). It can be further asked what each approach means for the business model.

Examining what firms do in the face of global value chain change and the end results reveal the alternative paths they can follow. Consideration of theoretical and practical examples of drastic changes in a firm's international activities (e.g., Intel, see Burgelman & Grove, 2007; DeLaval and Elekta in China, see Kao, 2013; Bosch and Philips, see Fratocchi et al., 2014) leads us to start the examination with four types of manifestations of 'living with' international opportunity transformations.

First, once change starts to happen, the entrepreneurial actors may be among the ones to *initiate or intensify* it (for better or worse). For example, Herrmann et al. (2007, p. 92) suggest that products "of a whole new kind have the potential to seriously change the balance of power in existing markets or even to create new markets." Google and Apple have been considered actors shaping their operating environments and changing the game beyond firm boundaries (Rindova et al., 2009; Abdelgawad et al., 2013). A nascent change such as a legal reform in a country could be lobbied further, or its boundaries could be tried by targeting activities to gray areas. However, a challenge is that the outcomes may be surprising with numerous changes to random directions (Burgelman & Grove, 2007). Therefore, this approach

## ***Living With Transformations of International Opportunities***

can be considered relatively rare (Abdelgawad et al., 2013). Regarding business model change, it can be considered to signify notable business model innovation challenges.

A more typical situation is where transformation is *utilized*. Some changes open access to new markets in a manner that does not require much more than replicating existing activities in the new area. For example, removing trade barriers (Vissak & Francioni, 2013) or hiring a new employee with language skills that fit attractive foreign markets (Hurmerinta et al., 2015) may construct new opportunities. Utilization of the transformation leading to autonomous opportunities, i.e., opportunities outside the scope of the existing corporate strategy, requires validation through the strategic context determination and securing of cash reserves within the firm (Burgelman & Grove, 2007). Hence, firms tend to make utilization decisions concerning the opportunity transformation in relation to the level of experienced uncertainties in the market (Figueira-de-lemos et al., 2011).

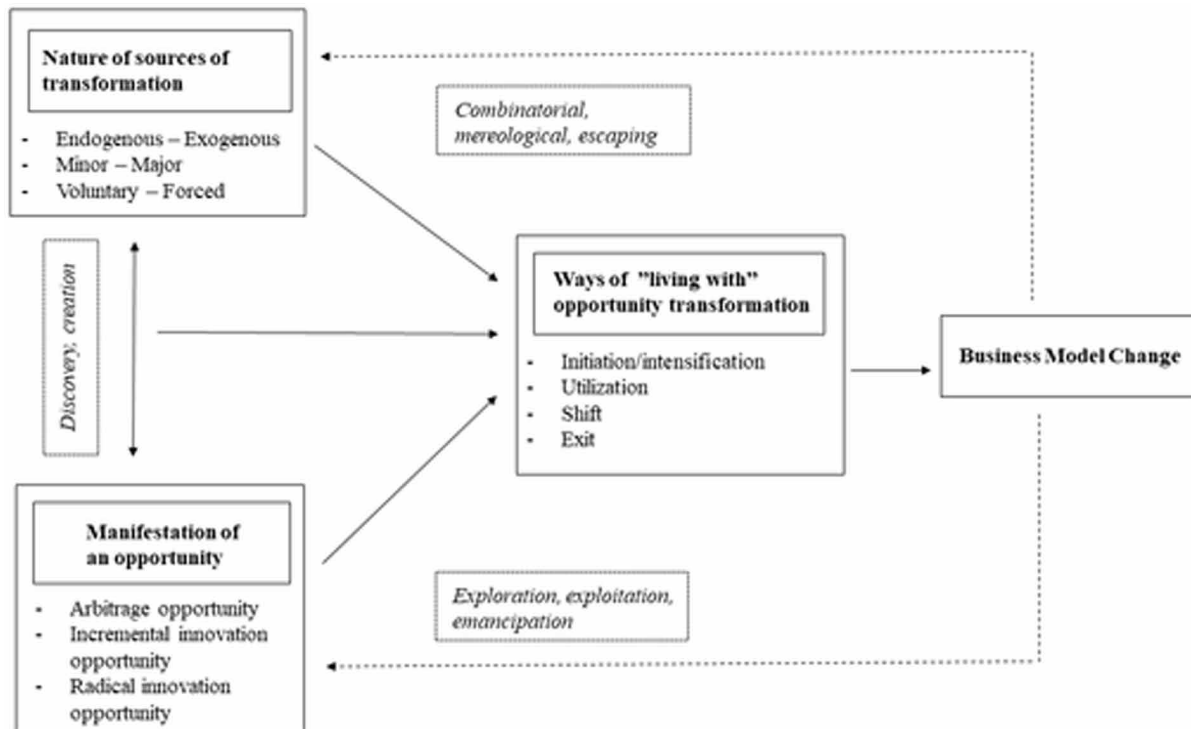
While transformation is often acted on by attempting to reinvent capabilities to maintain market position, it can also involve reinventing market position to secure the value of the existing capability base (Adner & Snow, 2010). *Shift* as a response can involve, for example, replacing a model of international operation with another (Pedersen et al., 2002), changing target markets, or giving up sales of a service or a product (and replacing that with other [possibly innovative] offerings). Intel, for example, moved during a relatively long period—between the early 70s and 1985—away from international competition on dynamic random-access memory dominated by government-supported Japanese firms and targeted its efforts on microprocessors, where the PC business of IBM started increasing in attractiveness some years later (Burgelman & Grove, 2007). Broader shifts have been happening and in tighter connection to global value chains. The practice of relocating a value-creating operation from abroad back to the home country after outsourcing or offshoring (Martínez-Mora & Merino, 2014) can be considered one possible response to transforming—especially disappearing—international opportunity. It can involve moving only a single value chain activity or even a single assembly line back to the country of origin (Fratocchi et al., 2014) instead of abandoning international operations.

Finally, *exit* may become the most feasible solution depending on the severity of the transformation. Reflecting on a firm's business model (see Sort & Turcan, 2019), exit can involve de-internationalizing or winding up a business (Benito & Welch, 1997; Turcan, 2013), and it is often considered a negative phenomenon; an international opportunity is no longer present or viable. Kao (2013) describes a case where a Swedish firm failed to find a viable solution to stay in Chinese markets. A reverse engineered, the locally produced competing product was granted a patent in China and started to restrict its business. The final source of failure was the Chinese government introducing such regulations that effectively ended the Swedish firm's sales. However, exit may also be well justified considering the situation (Benito & Welch, 1997; Figueira-de-Lemos et al., 2011; Sort & Turcan, 2019). For example, increasing competitive forces or the inability to prevent harmful imitation (Hurmelinna-Laukkanen & Ritala, 2012; Vissak & Francioni, 2013; Hurmelinna-Laukkanen, 2014) may justify exit. Changes in the economic climate (especially diminishing wage differentials between developing and developed countries), heightened emphasis on sustainability and flexibility, and the need to satisfy demand faster in home markets (Martínez-Mora & Merino, 2014) reflect good reasons to change the course of operation. However, making an exit decision is not easy, as it also means a notable business model change.

Figure 1 below summarizes in one framework these ways of 'living with' international opportunity transformations and how they emerge from the earlier manifestations of international opportunities under the influence of transformation sources. It also shows how these elements drive business model change, which then feeds back to the dynamic interaction, affecting the transformation sources or influencing

the viability and feasibility of ways of ‘living with’ the transformations. While the framework illustrates the complexities related to the multidirectional relationships between the central factors, it can be used as an analytical tool concerning the questions of business models in global value chains when observing its different aspects in varying combinations, as discussed in the following.

Figure 1. Business model



## DECIDING ON ACTION–CHANGES IN BUSINESS MODELS

The above framework suggests that when organizations face changes, they need to make informed decisions on how they will approach those changes and what they will (be able to) do (Adner & Snow, 2010). ‘Living with’ international opportunity transformation is not about changing the attributes of a single manifestation of an opportunity but about preserving some form of opportunity. Organizations need to evaluate opportunities in a timely fashion and incorporate the most viable ones into their business (Allegretti et al., 2021); there is a need to consider what kinds of changes in the business model are needed or warranted if any. While it could be expected that the appropriate response to technological changes, for example, is to accept them as inevitable (i.e., forced) and then determine the right timing and means for utilizing the change or to give up and exit, the suggested framework shows that other possibilities exist. For instance, continuing with the existing technology and modifying other aspects may work well (e.g., sailboats with a change in function rather than technology; Adner & Snow, 2010). Earlier research on innovation and international entrepreneurship indicates that opportunities may have path-breaking

## ***Living With Transformations of International Opportunities***

consequences that trigger changes in business models as new knowledge becomes incorporated with the existing one dynamically through trial and error (Chandra et al., 2009; Eriksson et al., 2022; Sainio et al., 2011). On the other hand, since the business model changes direct action towards future firm endeavors, they have a feedback loop to the manifestations of the company's future international opportunities. By tapping into these complexities, research has demonstrated that entrepreneurial processes are often not linear (Cornelissen & Clarke, 2010; Wood & McKinley, 2010; McMullen & Dimov, 2013). Varying processes and forces hence guide the developments.

The framework depicted in Figure 1 suggests that when 'living with' international opportunity transformations and reconsidering their business models, firms take market action based on the form of the international opportunity and the source of the transformation as relevant underlying decision factors. First, the existing manifestations of international opportunities inherently influence subsequent developments. Although different forms of international opportunities may be more or less vulnerable in the face of various transformative events, some path-dependencies are suggested to define opportunity development (Chandra et al., 2012). They also affect the business model changes. Indeed, changing an existing business model differs from creating a new one; existing business models are designed for certain conditions, so their transition from the determined path demands effort (Allegretti et al., 2021).

The ability to change direction (if needed) relates to how an organization approaches transformation and development. For example, Autio et al. (2000) suggest that firms focusing on knowledge creation as the source of advantage can adjust rapidly to foreign environments and changes and start new cycles of international opportunities. Several studies suggest that international opportunities exhibit *exploitation* and *exploration processes* to different extents (e.g., March 1991; Hohenthal et al., 2003; Vasilchenko & Morrish, 2011), connecting international opportunities and varying innovation types. In some cases, the organizational processes that give rise to international opportunities go even further, exhibiting *emancipation* with entrepreneurial efforts involving breaking free from and breaking up present constraints in the system or even society (see Rindova et al., 2009). Whereas a business model facilitating exploitative processes more likely yields arbitrage than innovation opportunities, exploration in entrepreneurial action and interaction might provide possibilities for arbitrage or innovation opportunities. Emancipatory processes are most likely to facilitate the emergence of radical innovation opportunities, even if they can also yield incremental innovation opportunities or arbitrage opportunities. The various processes guide the mutual constitution of opportunity manifestations, 'living with' opportunities, and business model changes.

Second, the nature of the sources of transformation matter. Opportunities never exist independently of their contexts; they are objects of behavior that may produce uncertainty, novelty, and, beforehand, non-existent results (Venkataraman et al., 2012). Dispersed global production, capital stirrings, emerging economies' market power, or increasingly sophisticated digital and other technologies produce different levels of uncertainty and disparities in business.

At first glance, international arbitrage opportunities seem to relate to stable environments with minor changes and incremental and radical innovation opportunities to more dynamic ones. Dynamic environments with continuous or significant changes in endogenous and exogenous factors may challenge actors relying on arbitrage opportunities. Embracing notable transformation is not a straightforward issue, however. A significant change may destroy the premises of innovation opportunities before they have become adopted widely enough to generate investment returns (Figueira-de-Lemos et al., 2011). A major transformation source could cause the opportunity to either 'make it or break it,' and it may be that the alternative ways of 'living with' opportunity transformations become limited rather than



broader when the starting point is a recent radical or incremental innovation opportunity. Whether or not the source of transformation exhibits involuntary character also matters. For example, it may be that focusing on established arbitrage opportunities has increased commitment and costs to a level where exit as one alternative would indicate failure rather than a rational choice (Vissak and Francioni, 2013; Sort et al., 2021).

Entrepreneurial actors are not seen adapting to the presumptions of the predetermined steps and rules. Instead, it is considered that refusal and questioning lead to moving beyond the apparent and given (Nayak & Maclean, 2013). This freedom of choosing the possible end is crucial to understanding how business models may change to accommodate opportunity transformations (Sarasvathy & Dew, 2005ab; Dew et al., 2011); some opportunity transformations are *mereological* rather than *combinatorial* (Venkataraman et al., 2012). A mereological change indicates that if any parts of the whole change, it is not the same. In contrast, in combinatorial change, the relative relationship of constituting parts does not change the whole.

In some extreme cases, the transformation opens space for so-called ‘*escaping opportunities*’ that can expand to have a global impact and paradigmatic change (Pacheco et al., 2010). These ‘*escaping opportunities*’ are barely under anyone’s control and typically produce unexpected, even radical, side effects (see Abdelgawad et al. 2013). Initially, the ‘*escaping opportunities*’ are not necessarily grounded on risky or large mega-projects endogenous to the firm or major exogenous events. Often, they start from minor everyday problems and marginal advancements (Rao & Giorgi, 2006; Adner & Levinthal, 2008; Vaghely & Julien, 2010), which can occur in any part of a global value chain. These opportunity transformations easily remain invisible until they emerge as voluntary breakthroughs or forced acute crises. This makes them difficult to address in business model changes beforehand but necessary to account for once realized.

Preserving opportunities in different forms through varying sources of transformation is connected to the business model change in that the changes in the opportunities and ‘living with’ them drive the business model change. Each choice made involves a fundamentally different business model. Therefore, each choice will have implications for the firm’s performance (Zott & Amit, 2010), which, in turn, influences subsequent opportunity transformations, as indicated in Figure 1.

## **FRAMEWORK APPLICABILITY–RESEARCH AND PRACTICE IMPLICATIONS**

The framework we provided and illustrated in Figure 1 aims to be relatively broad, and we deliberately bring in various scientific discussions to conceptualize the phenomenon. It, therefore, offers multiple opportunities for research and practice.

The framework suggests that apart from the exit that effectively means withdrawal from an international opportunity domain, the ways of ‘living with’ international opportunity transformation are likely to usher in new manifestations of international opportunities handled through business model changes. Interesting then is whether specific combinations (e.g., incremental innovation opportunity being substituted by another incremental innovation opportunity vs. radical innovation vs. arbitrage opportunity) can be traced back to earlier choices regarding the last opportunity. In global value chains, this issue can be evaluated from different angles: on the one hand, opportunity transformation triggers can emerge from changes in the global value chain, but on the other hand, it also may be that the opportunity trans-

## ***Living With Transformations of International Opportunities***

formations (and disappearances) change the global value chains—thereby ushering in new opportunity transformations, and business model changes.

This intertwinement provides a fertile ground for further research. For empirical work, we can suggest two primary lines of research. A combination of the core factors, i.e., transformation sources, opportunity manifestations, ways to ‘live with’ transformations, and business model changes, provides a basis for hypotheses formulation and statistical analysis of the relationships between the variables. By considering the central constructs, a different approach can be taken. As they typically involve cognitions and actions, their capturing will likely require rich, qualitative data sets, possible observational or other such in-depth data, to catch the deep nuances. Longitudinal research designs are needed to gain in-depth insight into opportunity transformations (what was transformed and where the transformation led) and capture the related business model changes. Both quantitative and qualitative work could benefit from examining small firms. Studying these kinds of organizations may be particularly fruitful in uncovering the link between opportunities and changes in business models and understanding the strategic flexibility of the international activities to be harnessed through the firms’ business models.

Managers can use the introduced framework to analyze international opportunities and business models. For example, matching specific types of transformation sources to recent manifestations of international opportunities, evaluating the risks and benefits, and following the trail to different expressions of handling the transformations help managers to have more ground for making the all-important decisions about (the future of) their business models. When researchers observe these activities, more knowledge accumulates on international opportunities and business model changes.

## **CONCLUSION**

This study contributes to the existing body of knowledge on international opportunity transformations in global value chains and their role in business model change. In particular, it combines literature on business model change that has addressed many of its antecedents and outcomes and studies on international opportunities that have an advanced understanding of their premises and manifestations. Adding to earlier studies that have primarily focused on market dynamics as a prerequisite or antecedent for opportunities, this study highlights transformations as a factor to be addressed once an opportunity has reached some exploitable form (see Venkataraman et al., 2012). Relatedly, it emphasizes that disappearances of opportunities are as important as the transformation of an opportunity into a new one. Maturity and decline need to be acknowledged next to growth regarding business models (see Sort & Turcan, 2019) and technological evolution and competition (Adner & Snow, 2010). Various changes occur—and can be initiated—to benefit an organization in complex global value chains. Not all actors are equally prepared for the various transformations. They might fail to ‘live with’ the transformations, in which case the firm or the viability of its value creation design becomes jeopardized. Considering the full scale of opportunity transformations is relevant to making the best out of potentially challenging situations.

## REFERENCES

- Abdelgawad, S. G., Zahra, S. A., Svejenova, S., & Sapienza, H. J. (2013). Strategic leadership and entrepreneurial capability for game change. *Journal of Leadership & Organizational Studies*, 20(4), 394–407. doi:10.1177/1548051813475484
- Adner, R., & Levinthal, D. (2008). Doing versus seeing: Acts of exploitation and perceptions of exploration. *Strategic Entrepreneurship Journal*, 1(2), 43–52. doi:10.1002/ej.19
- Adner, R., & Snow, D. (2010). Old technology responses to new technology threats: Demand heterogeneity and technology retreats. *Industrial and Corporate Change*, 19(5), 1655–1675. doi:10.1093/icc/dtq046
- Åkerman, N. (2015). International opportunity realization in firm internationalization: Non-linear effects of market-specific knowledge and internationalization knowledge. *Journal of International Entrepreneurship*, 13(3), 242–259. doi:10.1007/10843-015-0152-x
- Allegretti, S., Seidenstricker, S., Fischer, H., & Arslan, S. (2021). Executing a business model change: Identifying key characteristics to succeed in volatile markets. *Leadership, Education, Personality. An Interdisciplinary Journal*, 3(1), 21–33.
- Alvarez, S., & Barney, J. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1-2), 11–26. doi:10.1002/ej.4
- Anokhin, S., Wincent, J., & Autio, E. (2011). Operationalizing opportunities in entrepreneurship research: Use of data envelopment analysis. *Small Business Economics*, 37(1), 39–57. doi:10.1007/1187-009-9227-1
- Autio, E., Sapienza, H., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity and imitability on international growth. *Academy of Management Journal*, 43(5), 909–924. doi:10.2307/1556419
- Benito, G., & Welch, L. (1997). De-internationalization. *Management International Review*, 37, 7–25.
- Bergamaschi, M., Bettinelli, C., Lissana, E., & Picone, P. M. (2021). Past, ongoing, and future debate on the interplay between internationalization and digitalization. *The Journal of Management and Governance*, 25(4), 983–1032. doi:10.1007/10997-020-09544-8
- Brozovic, D. (2018). Strategic flexibility: A review of the literature. *International Journal of Management Reviews*, 20(1), 3–31. doi:10.1111/ijmr.12111
- Buckley, P., & Casson, M. (1998). Models of the multinational enterprise. *Journal of International Business Studies*, 29(1), 21–44. doi:10.1057/palgrave.jibs.8490023
- Buckley, P., & Ghauri, P. (2004). Globalisation, economic geography and the strategy of multinational enterprises. *Journal of International Business Studies*, 35(2), 81–98. doi:10.1057/palgrave.jibs.8400076
- Buckley, P., & Strange, R. (2015). The governance of the global factory: Location and control of world economic activity. *The Academy of Management Perspectives*, 29(2), 237–249. doi:10.5465/amp.2013.0113
- Burgelman, R. A., & Grove, A. S. (2007). Let chaos reign, then rein in chaos—repeatedly: Managing strategic dynamics for corporate longevity. *Strategic Management Journal*, 28(10), 965–979. doi:10.1002/mj.625

## ***Living With Transformations of International Opportunities***

Burt, S., Mellahi, K., Jackson, T., & Sparks, L. (2002). Retail internationalization and retail failure: Issues from the case of Marks and Spencer. *International Review of Retail, Distribution and Consumer Research*, 12(2), 191–219. doi:10.1080/09593960210127727

Chandler, G., DeTienne, D., McKelvie, A., & Mumford, T. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, 26(3), 375–390. doi:10.1016/j.jbusvent.2009.10.006

Chandra, Y., Styles, C., & Wilkinson, I. (2009). The recognition of first time international entrepreneurial opportunities: Evidence from firms in knowledge-based industries. *International Marketing Review*, 26(1), 30–61. doi:10.1108/02651330910933195

Cornelissen, J. P., & Clarke, J. S. (2010). Imagining and rationalizing opportunities: Inductive reasoning and the creation and justification of new ventures. *Academy of Management Review*, 35(4), 539–557.

Dedrick, J., Kraemer, K. L., & Linden, G. (2010). Who profits from innovation in global value chains?: A study of the iPod and notebook PCs. *Industrial and Corporate Change*, 19(1), 81–116. doi:10.1093/icc/dtp032

Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2011). On the entrepreneurial genesis of new markets: Effectual transformations versus causal search and selection. *Journal of Evolutionary Economics*, 21(2), 231–253. doi:10.100700191-010-0185-1

Di Minin, A., & Bianchi, M. (2011). Safe nests in global nets: Internationalization and appropriability of R&D in wireless telecom. *Journal of International Business Studies*, 42(7), 910–934. doi:10.1057/jibs.2011.16

Dimitratos, P., Voudouris, I., Plakoyiannaki, E., & Nakos, G. (2012). International entrepreneurial culture – toward a comprehensive opportunity-based operationalization of international entrepreneurship. *International Business Review*, 21(4), 708–721. doi:10.1016/j.ibusrev.2011.08.001

Ellram, L. M., Tate, W. L., & Petersen, K. J. (2013). Offshoring and reshoring: An update on the manufacturing location decision. *The Journal of Supply Chain Management*, 49(2), 14–22. doi:10.1111/jscm.12019

Eriksson, T., Heikkilä, M., & Nummela, N. (2022). Business model innovation for resilient international growth. *Small Enterprise Research*, 29(3), 1–22. doi:10.1080/13215906.2022.2092890

Figueira-de-Lemos, F., Johanson, J., & Vahlne, J. E. (2011). Risk management in the internationalization process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2), 143–153. doi:10.1016/j.jwb.2010.05.008

Fletcher, D. (2006). Entrepreneurial processes and the social construction of opportunity. *Entrepreneurship and Regional Development*, 18(5), 421–440. doi:10.1080/08985620600861105

Foss, N. J., Klein, P. G., Kor, Y. Y., & Mahoney, J. T. (2008). Entrepreneurship, subjectivism, and the resource-based view: Toward a new synthesis. *Strategic Entrepreneurship Journal*, 2(1), 73–94. doi:10.1002/ej.41

Fratocchi, L., Di Mauro, C., Barbieri, P., Nassimbeni, G., & Zanoni, A. (2014). When manufacturing moves back: Concepts and questions. *Journal of Purchasing and Supply Management*, 20(1), 54–59. doi:10.1016/j.pursup.2014.01.004

- Gassmann, O., Frankenberger, K., & Csik, M. (2014). Revolutionizing the business model. In *Management of the Fuzzy Front End of Innovation* (pp. 89–97). Springer. doi:10.1007/978-3-319-01056-4\_7
- George, N., Parida, V., Lahti, T., & Wincent, J. (2016). A systematic literature review of entrepreneurial opportunity recognition: Insights on influencing factors. *The International Entrepreneurship and Management Journal*, 12(2), 309–350. doi:10.1007/11365-014-0347-y
- Herrmann, A., Gassmann, O., & Eisert, U. (2007). An empirical study of the antecedents for radical product innovations and capabilities for transformation. *Journal of Engineering and Technology Management*, 24(1), 92–120. doi:10.1016/j.jengtecman.2007.01.006
- Hervé, A., Schmitt, C., & Baldegger, R. (2020). Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises. *Technology Innovation Management Review*, 10(7), 29–41. doi:10.22215/timreview/1373
- Hohenthal, J., Johanson, J., & Johanson, M. (2003). Market discovery and the international expansion of the firm. *International Business Review*, 12(6), 659–672. doi:10.1016/j.ibusrev.2003.06.001
- Hurmelinna-Laukkanen, P. (2014). Appropriability regimes in the international playground for innovation. *European Journal of International Management*, 8(6), 621–643. doi:10.1504/EJIM.2014.064898
- Hurmelinna-Laukkanen, P., & Ritala, P. (2012). Appropriability as the driver of internationalization of service-oriented firms. *Service Industries Journal*, 32(7), 1–18. doi:10.1080/02642069.2012.662490
- Hurmerinta, L., Nummela, N., & Paavilainen-Mäntymäki, E. (2015). Opening and closing doors: The role of language in international opportunity recognition and exploitation. *International Business Review*, 24(6), 1082–1094. doi:10.1016/j.ibusrev.2015.04.010
- Kao, P. (2013). *Institutional Change and Foreign Market Entry Behaviour of the Firm: A Longitudinal Study of Three Swedish Firms in China* [Ph.D. dissertation, Uppsala universitet].
- Legner, C., Eymann, T., Hess, T., Matt, C., Böhmman, T., Drews, P., Mädche, A., Urbach, N., & Ahlemann, F. (2017). Digitalization: Opportunity and challenge for the business and information systems engineering community. *Business & Information Systems Engineering*, 59(4), 301–308. doi:10.1007/12599-017-0484-2
- Mainela, T., Puhakka, V., & Servais, P. (2014). The concept of international opportunity in international entrepreneurship: A review and a research agenda. *International Journal of Management Reviews*, 16(1), 105–129. doi:10.1111/ijmr.12011
- March, J. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87. doi:10.1287/orsc.2.1.71
- Martínez-Mora, C., & Merino, F. (2014). Offshoring in the Spanish footwear industry: A return journey? *Journal of Purchasing and Supply Management*, 20(4), 225–237. doi:10.1016/j.pursup.2014.07.001
- Massa, L., Tucci, C. L., & Afuah, A. (2017). A critical assessment of business model research. *The Academy of Management Annals*, 11(1), 73–104. doi:10.5465/annals.2014.0072
- McDonald, R. M., & Eisenhardt, K. M. (2020). Parallel play: Startups, nascent markets, and effective business-model design. *Administrative Science Quarterly*, 65(2), 483–523. doi:10.1177/0001839219852349

## ***Living With Transformations of International Opportunities***

- McKinley, W. (2022). Doomsdays and new dawns: Technological discontinuities and competence ecosystems. *The Academy of Management Perspectives*, 36(2), 729–743. doi:10.5465/amp.2019.0027
- McMullen, J. S., & Dimov, D. (2013). Time and the entrepreneurial journey: The problems and promise of studying entrepreneurship as a process. *Journal of Management Studies*, 50(8), 1481–1512. doi:10.1111/joms.12049
- Mykhaylenko, A., Motika, Ā., Waehrens, B. V., & Slepniov, D. (2015). Accessing offshoring advantages: What and how to offshore. *Strategic Outsourcing*, 8(2/3), 262–283. doi:10.1108/SO-07-2015-0017
- Nayak, A., & Maclean, M. (2013). Co-evolution, opportunity seeking and institutional change: Entrepreneurship and the Indian telecommunications industry, 1923–2009. *Business History*, 55(1), 29–52. doi:10.1080/00076791.2012.687538
- Nelson, R., & Winter, S. (1982). *An Evolutionary Theory of Economic Change*. Belknap.
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice*, 29(5), 537–553. doi:10.1111/j.1540-6520.2005.00097.x
- Pacheco, D. F., Dean, T. J., & Payne, D. S. (2010). Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development. *Journal of Business Venturing*, 25(5), 464–480. doi:10.1016/j.jbusvent.2009.07.006
- Parida, V., Sjödin, D., & Reim, W. (2019). Reviewing literature on digitalization, business model innovation, and sustainable industry: Past achievements and future promises. *Sustainability*, 11(2), 1–18. doi:10.3390/s11020391
- Pedersen, T., Petersen, B., & Benito, G. R. (2002). Change of foreign operation method: Impetus and switching costs. *International Business Review*, 11(3), 325–345. doi:10.1016/S0969-5931(01)00063-4
- Rao, H., & Giorgi, S. (2006). Code breaking: How entrepreneurs exploit cultural logics to generate institutional change. *Research in Organizational Behavior*, 27, 269–304. doi:10.1016/S0191-3085(06)27007-2
- Rindova, V., Barry, D., & Ketchen, D. J. Jr. (2009). Entrepreneurship as emancipation. *Academy of Management Review*, 34(3), 477–491. doi:10.5465/amr.2009.40632647
- Sainio, L. M., Saarenketo, S., Nummela, N., & Eriksson, T. (2011). Value creation of an internationalizing entrepreneurial firm: The business model perspective. *Journal of Small Business and Enterprise Development*, 18(3), 556–570. doi:10.1108/14626001111155709
- Sarasvathy, S. D., & Dew, N. (2005a). Entrepreneurial logics for a technology of foolishness. *Scandinavian Journal of Management*, 21(4), 385–406. doi:10.1016/j.scaman.2005.09.009
- Sarasvathy, S. D., & Dew, N. (2005b). New market creation through transformation. *Journal of Evolutionary Economics*, 15(5), 533–565. doi:10.1007/00191-005-0264-x
- Sarasvathy, S. D., Dew, N., Velamuri, S. R., & Venkataraman, S. (2003). Three views of entrepreneurial opportunity. In *Handbook of entrepreneurship research* (pp. 141–160). Springer.

- Sohl, T., Vroom, G., & McCann, B. T. (2020). Business model diversification and firm performance: A demand-side perspective. *Strategic Entrepreneurship Journal*, 14(2), 198–223. doi:10.1002/ej.1342
- Sort, J. C., Taran, Y., & Turcan, R. V. (2021). Business model configuration view for realising a re-internationalisation strategy. *Journal of Business Models*, 9(1), 60–66.
- Sort, J. C., & Turcan, R. V. (2019). De-internationalization: A business model perspective. *Journal of Business Models*, 7(4), 39–44.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. doi:10.1016/j.lrp.2017.06.007
- Turcan, R. (2011). De-internationalization: A conceptualization. In AIB-UK & Ireland Chapter Conference on 'International Business: New Challenges, New Forms, New Practices.' AIB.
- Vaghely, I. P., & Julien, P. A. (2010). Are opportunities recognized or constructed?: An information perspective on entrepreneurial opportunity identification. *Journal of Business Venturing*, 25(1), 73–86. doi:10.1016/j.jbusvent.2008.06.004
- Van Assche, A. (2017). Global value chains and innovation. In H. Bathelt, P. Cohendet, S. Henn, & L. Simon (Eds.), *The Elgar Companion to Innovation and Knowledge Creation*. Edward Elgar Publishing. doi:10.4337/9781782548522.00058
- Vasilchenko, E., & Morrish, S. (2011). The role of entrepreneurial networks in the exploration and exploitation of internationalization opportunities by information and communication technology firms. *Journal of International Marketing*, 19(4), 88–105. doi:10.1509/jim.10.0134
- Venkataraman, S., Sarasvathy, S., Dew, N., & Forster, W. (2012). Reflections on the 2010 AMR decade award: Whither the promise? Moving forward with entrepreneurship as a science of the artificial. *Academy of Management Review*, 37(1), 21–33.
- Vissak, T., & Francioni, B. (2013). Serial nonlinear internationalization in practice: A case study. *International Business Review*, 22(6), 951–962. doi:10.1016/j.ibusrev.2013.01.010
- Wadin, J. L., & Ode, K. A. (2019). Business models for sustainability-change in dynamic environments. *Journal of Business Models*, 7(1), 13–38.
- Wood, M. S., & McKinley, W. (2010). The production of entrepreneurial opportunity: A constructivist perspective. *Strategic Entrepreneurship Journal*, 4(1), 66–84. doi:10.1002/ej.83
- Zahra, S. (2008). The virtuous cycle of discovery and creation of entrepreneurial opportunities. *Strategic Entrepreneurship Journal*, 2(3), 243–257. doi:10.1002/ej.47
- Zott, C., & Amit, R. (2010). Business model design: An activity system perspective. *Long Range Planning*, 43(2-3), 216–226. doi:10.1016/j.lrp.2009.07.004

## **ADDITIONAL READING**

Andersson, U., Dasí, Á., Mudambi, R., & Pedersen, T. (2016). Technology, innovation and knowledge: The importance of ideas and international connectivity. *Journal of World Business*, 51(1), 153–162. doi:10.1016/j.jwb.2015.08.017

## **KEY TERMS AND DEFINITIONS**

**Business Model:** This is the logic by which firms create and capture value.

**Opportunity:** This is a meaningful and favorable alignment of firm-internal and external attributes (e.g., resources, capabilities, contingency factors), allowing for new business.