



This is an Accepted Manuscript version of the article published originally by De Gruyter, accepted for publication in the book:

De Gruyter Handbook of Digital Entrepreneurship

This version may differ from the original in pagination and typographic details. When using, please cite the original.

AUTHOR(S)

Bouwman, H., Meroño, A., Heikkilä, M., & Eriksson, T.

TITLE

Leveraging Digitality for SME Internationalization and Business Model Innovation

YEAR

2024

DOI

10.1515/9783110764222-014

CITATION

Bouwman, H., Meroño, A., Heikkilä, M., & Eriksson, T. (2024). Leveraging Digitality for SME Internationalization and Business Model Innovation. *De Gruyter Handbook of Digital Entrepreneurship*, 277–300.

<https://doi.org/10.1515/9783110764222-014>

VERSION

Accepted Manuscript

LICENSE

Copyright © 2024 De Gruyter

Leveraging digitality for SME internationalization and Business Model Innovation

H. Bouwman, Delft University of Technology, The Netherlands, w.a.g.a.bouwman@tudelft.nl

A. Meroño, University of Murcia, Spain angelmer@um.es

M. Heikkila, University of Turku, Finland marikka.heikkila@utu.fi

T. Eriksson, University of Turku, Finland taina.eriksson@utu.fi

ABSTRACT

Small and medium-sized enterprises (SMEs) are constantly looking for opportunities for growth, at home and abroad. While changing a few components of a business model (BM) may be enough to realize local growth, international expansion may require more radical BM changes. This paper takes an explorative approach to analyze the implications of the entrepreneurial SME's internationalization strategy to BM Innovation. Specifically, we consider the role of digital transformation. As such, this study contributes to existing literature on (1) *international management*, (2) *digitalization*, and (3) *BM Innovation experimentation and outcome*. We carry out a multiple case study using a theoretical sampling approach based on two explanatory factors: 1) the maturity of the SME i.e. established firm versus start-up, and 2) the use of IT i.e. web-based channels versus digital platforms. The study shows how internationalization led to different type of changes in the BM. It also shows how digitalization can help in entering into new international markets. Digital platforms provide great potential for internationalization for SMEs, but require changes impacting most business model components, such as redesign of value proposition and development of local ecosystems.

Originality: To date, few studies have looked at IT platforms as a way to enter international markets. Platform based BMI requires the development of local ecosystems.

Key words

Business Model Innovation; SME; internationalization; digitalization; case study; platform

Introduction

Due to trade liberalization, the use of information and communication technology (IT) and a reduction of trade barriers (Ruzier et al., 2006) many companies have started to operate in foreign markets. Although recent geo-political and economic developments or the current pandemic can lead to shorter value chains and protection of local economies, internationalization of markets remains a core issue and relevant research topic.

Internationalization has received a great deal of attention from researchers from a variety of theoretical backgrounds (Santos et al., 2015) explaining the geographical expansion of business activities abroad. The theories of internationalization consider the decision to enter foreign markets a strategic choice and directly related to BM design and Innovation (Autio, 2017). Business Models (BM) - the *firm's logic how it creates, delivers and captures value*' (Teece, 2010) - can be seen as an implementation of strategic choices (Al-Debei & Avison, 2010; Ammar & Chereau, 2018; Casadeus-Masanell & Ricart, 2010a;

Chereau & Meschi, 2019; Heikkila et al., 2018). So, strategic choices regarding internationalization strategy are reflected in the company's BM.

In line with this suggestion, this chapter explores the way the strategic decision to internationalize impacts BM innovation (BMI), i.e. the adaptation, change, redesign, renewal, reconfiguration or creation of a new BM (Priem et al, 2018). So far, studies on internationalization involving BM and BMI are limited in number and detail. Existing studies are either conceptual (Autio, 2017; Onetti et al., 2012; Rask, 2014), focus on cases involving large international ventures (Dunford et al., 2010; Sainio et al., 2011) or have a quantitative approach (Pucihar et al, 2019; Gatautis et al, 2019; de Oliveira et al., 2020), but none of these studies explore decisions and arguments related to alternative solutions of BMI. In this chapter we focus especially on digitalization of BMI in an internationalization context (Bouwman et al., 2019; El Sawy & Pereira, 2012; Veit et al., 2014; Rachinger et al., 2018). Instead of entering international markets with the help of local agents, a digital platform can be customized for a specific country, language and culture.

Small and medium sized enterprises (SMEs) are quite diverse in terms of their maturity, industry sector, size, IT focus and many other areas, such as learning capabilities (Arbussa et al. 2017). Established businesses typically differ from start-ups by vested relations and availability of resources and capabilities. While BMs may be more stable in established firms, they also may be more difficult to change. On the other hand, the BM of a start-up may be more volatile and agile (Heikkilä et al, 2018). Specifically, start-up companies may be more eclectic, or even start as a Born Global (Rennie, 1993; Rasmussen & Madsen, 2002). Start-ups are more flexible and eager to use advanced IT. Therefore, we will discuss the impact of the decision to enter foreign markets by the entrepreneurs in established companies and in start-ups, assuming that the implementation of internationalization will have distinct implications for their BM.

The aim of this chapter is to present insight on the implications of the strategic decision to expand in international markets and the consequences for BMI with a focus on (1) the role digitalization in market expansion, and (2) firm's age. As such, this chapter, based on four case studies, contributes to existing literature on *management, digitalization, and BM Innovation*.

We start by reviewing existing studies involving internationalization, BMI and digitalization which will serve as a basis for the case studies involving companies expanding from their national markets into other European and international markets. Last, we present the results and discuss their implications.

Literature review

Internationalization

Internationalization is considered "a synonym for the geographical expansion of economic activities over a national country's border" (Ruzier et al., 2006, p. 478). Similar to traditional definition of entrepreneurial opportunity (Eckhardt and Shane, 2003), in internationalization, the entrepreneurs combine new means with new ends. Exploiting the opportunity involves activities across national boundaries (Mainela et al., 2014). Table 1. presents the key notions from two theories that explain SME internationalization.

Table 1 Theoretical perspectives to internationalization of SMEs

Theory	Main authors	Main idea
Evolutionary Model (Uppsala model)	Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977	Internationalization is a gradual process during which companies accumulate knowledge on foreign markets and how to operate at an international level.
Effectuation, & International New Ventures	McDougall et al., 1994; Zahra & Garvis, 2000; Knight, 2015; Sarasvathy, 2001; Evers & O’Gorman, 2011	Firm seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries. As part of this process, they approach and experiment on international/global markets. The internationalization decisions are based on entrepreneur’s ‘resources at hand’, such as prior experience and prior knowledge of international markets; and the entrepreneur’s business and social networks.

These theories have proven useful for understanding SME internationalization in various contexts. The Uppsala model, and the new venturing and bricolage approaches (Sarasvathy, 2001) are helpful in grasping the gradual process of internationalization. Earlier research has found that most small businesses adopt an evolutionary model as proposed by Johanson and Vahlne (1977), and only start looking at foreign markets after they have established a solid position in their home market and are integrated in local value chains. In most cases, they first expand to markets that are geographically and culturally closer, and then to more distant ones, targeting one foreign market after another (Johanson & Vahlne, 1990). In many cases, their strategy is based on opportunity and coincidence. Strategic planning theorists suggest that, when companies decide to internationalize, their decision is based on a systematic approach (Papadopoulos & Denis, 1988; Andersen & Buvik, 2002) involving a variety of decision-making methods, pre-defined criteria and statistical assessments, including product-specific market size and growth potential, level of economic development and economic attractiveness.

By contrast to the gradual internationalization process, there has emerged a distinct group of companies, known as the Born Globals (Rennie, 1993; Rasmussen & Madsen, 2002), that start their international activities soon after inception. Technological development is one of the most important drivers behind the emergence of these companies (Rennie, 1993). They tend to serve multiple countries in parallel and do not necessarily start from a national market or from markets that are geographically or culturally close. Born Globals, also known as international new ventures (McDougall, 1989) or global start-ups (McDougall et al., 1994) are understood to be young (generally up to five years or, according to the EU’s definition, ten years), independent, individual companies that have an active, strategic intention to internationalize from the very start and that engage intensively in international activities (Eurofound, 2012). In addition, Born Globals tend to adopt a less systematic approach (Papadopoulos & Denis, 1988; Andersen & Buvik, 2002), making decisions based on intuition or examples from other companies. They are more likely to adopt a non-systematic approach, mainly because a systematic approach would require the necessary resources and knowledge (Musso and Francioni, 2012; Francioni et al., 2013).

Along the same lines, Musso and Francioni (2014) suggest that firms not always deliberately choose how they enter foreign markets and that their decision is often a consequence of relatively idiosyncratic agreements with foreign partners or the result of fulfilling an unsolicited order. Earlier studies indicate that most SMEs in fact adopt this relatively passive, more process-focused approach (Pepe & Musso, 2003), while Andersen & Buvik (2002) suggest that market selection is based on opportunities resulting from relationship(s) with key partners, either international customers, e.g., business or consumers, or resource suppliers. Ruzzier et al. (2006) confirm that several key characteristics of the decision to internationalize has to do with the SME's operations, (new) business relations and networks. Because internationalization is very resource-intensive, SMEs tend to look for local partners and networks, which play an important role in discovering and exploiting business opportunities (Kontinen & Ojala, 2011). This collaboration between SMEs and their network partners can be described from different network perspectives (Child & Hsieh, 2014), including the number of partners, the nature and depth of the network ties (varying from social ties to business ties), the scope of the network (varying from primarily domestic to primarily international) and network behavior (varying from reactive to proactive).

The decisions to enter international markets are connected directly to BMI. The selection of markets and market segments, and the entry mode, as well as partner selection and level of organization (Ghemawat, 2007, 2011; Eriksson et al., 2022), are all directly related to specific BM components, e.g. value proposition, customer segmentation, partners, investment sharing, risks and costs. Before discussing this in greater detail, we take a look at more generally relevant BMI literature and at more specific literature from the point of view of internationalization and BMs.

Business model innovation

Since the early days of the Internet in the 1990's, research into BMs has become a mainstream scientific activity. BM research has its roots in e-Commerce research (Timmers, 1998; Afuah & Tucci, 2002; Bouwman et al, 2008; Osterwalder & Pigneur, 2010; El Sawy & Perreira, 2012), strategic management research (Teece, 2010; Zott & Amit, 2010; Zott et al., 2011) and Innovation Management research (Chesbrough & Rosenbloom, 2002). BMs are an intermediate step between the firm's strategy and operational model, which includes business processes, information exchange and IT infrastructure (Al-Debei & Avison, 2010; Casadesus-Masanell & Ricart, 2010a; Verhagen et al., 2021). Although there are many different BM typologies, they all include business model components or building blocks, which are often worked out in detail (see, for example, Onetti et al., 2012; Sainio et al., 2011). These BM components are related to the value proposition, products, customer segments and channels, as well as technological architectures or platforms, and applications, key partner networks or ecosystems, and investments, costs and revenues, and pricing models (see Bouwman et al., 2008).

BMs are often not static, but subject to learning, refinement and continuous innovation. Then BMI is seen as a learning process (von Delft et al., 2019), in which discovery through experimentation and trial-and-error, i.e. a more evolutionary approach, plays a more important role than conventional analytical approaches (Berends et al. 2016; De Reuver et al., 2009). The analytical approach includes the exploration of alternative options, before beginning to implement changes in the BM components.

Current academic interest involves, so far, quantitative studies (Zott & Amit, 2008; Pucci et al., 2017; Pati et al., 2018; Gatautis et al., 2019) focusing on the outcome, i.e. the innovated BM and the factors driving BMI (Pucihar et al., 2019). Only lately, BM research addresses the question how BMI actually

takes place or analyses what happens during BMI processes; for example, by identifying patterns (Remane et al., 2017a,b) and common paths in evolutionary BMI processes (Heikkilä et al., 2018). Case studies suggest that actual changes in business models are preceded by prolonged phases of trial and error (Sosna et al., 2010).

At the moment, studies involving BM and internationalization are relatively limited and conceptual in nature. Dunford et al (2010) discuss a single case and come to the conclusion that managers, when engaged in a process of internationalization, either copy their existing BM in foreign markets (Dunford et al, 2010), or radically reinvent their BM or change a some components, to adapt to circumstances in the new market (Eriksson et al., 2021; 2022). These changes are related to BM components like value proposition, the location of key partners and activities, key activities and partner networks needed to provide the resources and capabilities (Onetti et al.,2012; Rask, 2014). Autio (2017) proposes a normative framework combining theories on internationalization with BM. However empirical and case study research, on what actually is happening in BMI with a focus on internationalization, are largely missing.

Digitalization

Digitalization offers alternative ways to implement internationalization decisions in a BM (Ghemwat, 2007). Digital alternative channels for internationalization include international web presence (i.e., website, Facebook), e-commerce portals, marketplaces requiring a certain degree of local specificity as well as digital platforms to accommodate multiple international settings. The creation of a website does not necessarily indicate an intention to internationalize. However, digital business can use enhanced location-aware e-commerce portals or marketplaces to improve the online experience of a targeted international market (Yamin & Sinkovics, 2006). Web shops are then used to establish direct contact with international customers. Functionality, web-design and available of localized payment options are important, as is the local marketing of the portal or marketplace. From a BM perspective, this refers to activities/resources, partner and distribution channels selection (Eriksson et al., 2022; 2023). In many cases, a mix of indirect (B2B2C) physical and direct (B2C) virtual options are available for market internationalization.

Digital platforms - which are defined as software-based artefacts combined with third party applications and associated organizational processes and standards (Tiwana et al., 2010; Tilson et al., 2012; De Reuver et al., 2017) - provide new opportunities to approach multisided international markets. While Onetti et al. (2012) mention the concept of platforms for internationalization, they fail to provide a more elaborate perspective, for instance on the role of platform providers and local partners. Platform providers design their platform to sell their core products but also to enable third parties to promote their products, in order to localize and create a critical mass of relevant products and users. The local partners, labelled as complementors, may use international platforms for their own economic purposes, e.g. advertising, offering local content or complementary products and services. Realizing cross-side network externalities is a core element of the economic viability of such a platform (Gawer, 2009; Gawer, 2014; Thomas et al, 2014). Digital platform requires a careful consideration of the BMs of all involved partners in an ecosystem that supports the platform. The focus is more on strategic collaboration, the sharing of resources and capabilities between ecosystem partners, information sharing and process alignment (Solaimani et al., 2018).

Empirical research

Our research is based on the integration of internationalization theories, BMI and digitalization research and has a more practical focus than for instance Autio (2017). The BM perspective is limited to developments in approaching international markets, as embedded in Rask’s model (Rask, 2014), activity system thinking, as introduced by Porter (1996) and further elaborated by Zott & Amit (2010) and Casadesus-Masanell and Ricart (2010). The core of our research is the internationalization of the SMEs. We first study status, aims and strategies of the companies to internationalize, then we go through the changes they made in their BMs paying special attention to digitalization.

Research Method

As this area of research is fairly new, our case study approach (based on Creswell, 2007; Eisenhardt, 1989; Glaser & Strauss, 1967; Yin, 2013) is abductive in nature (Paul, 1993). Some theoretical sampling notions related to case selection are used (see table 2). As part of a large European project, a database of case studies related to Business Model Innovation in SMEs was assembled. These cases primarily cover the period between 2012-2020. A theoretical sampling procedure related to contextual explanations was used based on two dimensions: 1) the maturity of the SME being either (a) established firm (SME) or (b) start-up (established less than 10 years ago at the time of research) and 2) the degree of digitalization divided in two groups (a) use of social media and websites with simple localized functionalities such as multiple languages, and b) the establishment of a full digital platform motivated by an internationalization strategy. This pseudo-experimental case design, as inspired by Cook and Campbell (1979), makes it possible to look for explanations based on these two dimensions. See table 2 for a summary of the information on the background, internationalization and business of the cases involved.

Table 2 Case descriptions

Degree of digitalization	Age of the SME	Start-Up
Generic, multi-language, Web-based Channels	Mature firm Candy Manufacturer, <i>Caramelos Cerdán</i> , is a small (47 employees) fourth generation Spanish family business (LLC) established in 1914, owned by a brother and sister. Entrepreneurial orientation was fundamental when founding the firm, and now to assure business continuity in a mature industry. The family members have dominant positions in the management of the company. Manufacturer of candy for B2B and B2C markets. The company focuses on product development, is innovative in its production processes and actively explores distribution channels. The company follows market trends carefully. Market: 50% Spain, 50% Rest of Europe. The company exports to 35 countries.	Design and sewing service provider, <i>Laureti</i> , is a micro-sized Lithuanian B2B company with an international focus on branding its high-quality sewing services to high-end European fashion companies. The company was established in 2013 by ex-workers of an international company, after the company closed down its business in Lithuania. Laureti is led by the entrepreneurs. The company has a website in English that offers information on the company as well as information on how to order. IT plays a core role in the primary process related to clothing design.
Digital platform	Educational service provider, <i>Iddink</i> , is originally a Dutch family business, now partially owned by investors. Established in 1922 and now a mid-sized company: building a	Traffic App platform (pseudonym: <i>Traffapp</i>), is a Dutch start-up, established in 2011, that provides a multi-language mobile traffic information application and platform in The

platform to facilitate its internationalization approach. The main activity involves logistics in secondary education, mainly books, although the firm also provides digital platforms for education, admin support and other applications. The company is active in the Netherlands, Belgium, Ireland and Spain.

Netherlands, Belgium, Germany, Luxembourg and France. The platform provides traffic information (navigation, traffic jams, fixed speed camera's, section speed control, incidents, user reports and information on mobile speed cameras – the latter subject to national regulations) based on open data and other data sources, to consumers (B2C), Radio Stations (B2B) and other businesses or government agencies (B2G).

To collect data, a detailed case study protocol was used. The protocol describes how the SMEs are involved in BMI, how the information is collected and how data from different sources are used (triangulation). A specific interview protocol was used, and all interviews were transcribed and validated by interviewees. Other data sources include website data, documents and, where available, Business Model descriptions and/or pictures. All websites were visited and used before interviews took place. Experience with websites and, if possible, with transactions, were used in the interviews. Interviews were conducted by individual researchers or, if possible, by multiple researchers. If new questions did arise, additional (telephone or Skype) interviews took place at a later date.

Table 3 Information on interviews, interviewees and other data-sources

		Period	Number of interviews	Interviewees	Desk research using Website	Public information	Other material
Established SME	Candy Manufacturer <i>Caramelos Cerdán</i>	2015, 2017	Two f2f and telephone interviews	owner/manager	Yes, consulted multiple times	Yes	Video Internal reports on performance
	Education Logistic service provider <i>Iddink</i>	2014, 2016-2017 and 2020	Twelve f2f interviews	Five C-level managers Seven education experts	Yes, consulted for basic information	Yes	Internal documents, e.g. Masterplan for BMI As-Is and To-Be BMs templates: CANVAS and STOF ontologies used; UML diagram for transitions
Start up	Design and sewing service <i>Laureti</i>	2015-2016, 2020	One f2f interview, one Skype interview	CEO owner and commercial director	Yes, consulted multiple times	No	No additional information available
	Traffic App platform <i>Traffiapps</i>	2017, 2020	One Skype, one f2f and one telephone interview	Marketing manager is main informant	Yes, also LinkedIn App was used	Yes	Online industry report on firm BM expressed in STOF

The data were collected by the authors of this chapter and updated in 2020-2021. Reliability procedures and validation steps are carefully described, and include, for instance, informed consent, clear rules to guarantee consistent coding and validation by informants and co-researchers.

The data is summarized in accordance with the case study template and contains information on (1) background characteristics of the firm (information sheet) including ownership and management team; (2) assessment of the firm's creative and innovative culture and level of innovativeness; (3) information on the BM, available BM templates, BMI, and tooling and metrics used; and (4) business performance. Next, information related to international markets served, triggers for internationalization (internal and external), foreign market, entry mode and partner selection were coded based on interviews and written reports, following the principal of open coding as suggested by Glaser & Straus (1967). A second cluster of codes is related to key decisions involving changes in the BM components or architecture. Finally, performance information related to internationalization was collected and coded as well. Coding was done using pencil and paper, starting from the interview transcripts and available documents, using open coding principals. Coding was summarized in information sheets, shared and discussed. These information sheets served as a basis for selective coding, as inspired by the research framework. The combination of selected coding in relation to an explicit and more formal model is proposed by Strauss & Corbin (1990, 1994) and recommended by Miles & Huberman (1994).

Results

We present a descriptive account of our observations on the four cases. We start by describing their internationalization and then BMI and performance.

Internationalization and digitalization

There are a number of drivers for internationalization. In the case of *Caramelos Cerdán*, the aim was to realize market expansion by copying the behavior of competitors.

For *Caramelos Cerdán*, the firm's core value proposition did not change when going abroad. *The selection of foreign markets* was initially based on their existing product offering and incidental market demand, cultural and physical proximity, as well as the potential country-related risks involved. The choice of entry mode by *Caramelos Cerdán* is fairly traditional, relying on channels related to direct export, fairs, participation in trade missions and personal contacts.

At the time this study was conducted, *Caramelos Cerdán* made only limited use of the Internet and social media. Although the more extensive Spanish website has been translated into English and French, those two versions only show products. Facebook provides limited, mainly internal and promotional, information.

Iddink is aware of the threat and relevance of digitalization to its business model, which mainly involves providing educational material, like books and training material, and IT support to schools. The company's strategy is aimed at expanding (1) from a logistic provider to a digital learning platform provider, and (2) from existing to new international markets. The virtual all-in-one learning platform is expected to serve as a multi-side market for educational content and application providers, students, parents and teachers alike. The partial acquisition of *Iddink* by an investor boosted the digital and internationalization strategy.

Iddink's strategy combined a greenfield approach and an acquisition model, and focused on internationalization in combination with digital transformation. As a first step, *Iddink* examined whether regulation would make it possible to expand the original value proposition to other European countries, based on renting out books, which ruled out Germany, where that is not allowed. *Iddink* launched greenfield operations in Belgium (2004) and Spain (2009). In 2012, *Iddink* acquired a competitor in Belgium to strengthen its foothold and adopted the same approach in the UK. Meanwhile, the company developed an education platform that makes it possible to replicate the new BM in other countries. *Iddink's* combined internationalization and digitalization approach is based on the company's platform as a main channel. The platform will be tested and implemented in Belgium and Spain.

In the other start-up case, the role of an investor was also crucial, albeit in the form of pulling out investments. As such, *Laureti's* decision to internationalize was caused by external drivers. The decision by the previous owner to close his company and move operations to Ukraine to benefit from lower production costs, led to the decision of the entrepreneurial minded employees to start their own business. While the old company operated as a service provider for mass production, the new company (*Laureti*) changed their value proposition by offering complicated (high-end) services at competitive prices.

Laureti's value proposition was adapted by offering more specialized sewing services to a higher market segment, albeit in the same foreign market. The company did *not* use any specific criteria to select foreign markets, other than cultural proximity. Instead, the selection was based on existing contacts and the search for new potential clients via the Internet.

There was no clear strategy for approaching foreign markets or attracting new customers. The company welcomed clients from any country and aimed for customer lock-in by offering high quality products. As such, emergent and accidental downstream internationalization led to well-established activities and the development of long-term relations. Although *Laureti* is somewhat more advanced in terms of offering e-commerce functionalities, information is only provided in English.

The internationalization of *traffapp* was also triggered by the acquisition by a Belgian investor, in addition to other reasons, including a need for market expansion and supporting international travel behaviour. *Traffapp* provides information on traffic congestions, as well as real-time information on speed and other traffic controls or traffic accidents. The platform is used by radio stations to inform listeners. Starting from the Netherlands, neighboring countries are important for creating handovers, because the need for travel information does not stop at the border. However, for the exploitation of the system to be worthwhile, a critical mass of users – and travelers – has to be reached in each country. In addition to open government data, user-generated traffic content plays an important role in the application, which is available in a number of European languages, i.e. Dutch, English, German and French, based on platforms provided with local partners and other ecosystem players, for instance local radio stations, to support the basic freemium, advertisement-based revenue model, after which a more advanced (and paid) app is launched, without advertisement and with additional functionalities.

The free version is crucial in achieving network externalities. The selection of relevant international markets is also based on criteria like (1) national regulation, i.e., some countries do not allow certain functionalities to be offered, for instance providing speed monitoring information, and (2) existing traffic information practices, compatibility of current systems or availability of existing platforms. At the

moment, the company, which already has a presence in the Netherlands, Belgium and Luxembourg, is looking at Germany, France, Scandinavia, Portugal and Slovenia, adopting a buy and build strategy. The *traffic information app* is distributed via existing platforms, like Android and iOS, as well as via dedicated native traffic platforms. The app is promoted via social media.

None of these cases involved, made of a formal internationalization strategy. Instead, internationalization was based on a more emergent approach. Even though all utilize digital channels, the two more IT-savvy companies utilize both platform strategies to acquire and retain international customers. So, internationalization is closely related to the opportunities provided by digital technologies and BM experimentation, rather than based on a formal strategy.

Business model Innovation and performance

Here the question is what the *BMI actually entailed and how BMI affected the performance* of the SME.

Caramelos Cerdán's BM is the least affected (See Table 4). The firm relies on its experience and knowledge accumulated over the years. This is typical for a Spanish production-focused family business. Although changes in user demand require product innovation, the company operates in a stable and quite traditional manner. Thus, no big changes were seen in the BM; when the company introduced new products to the markets, it utilized mainly its existing international partner network which they had built over time and have reached a certain status quo. Still, as countries differ, they used agents or importers according to particularities and utilized digital channel mainly to support the existing channels.

Table 4 BMI of Caramelos Cerdán

BM component	Change in Caramelos Cerdán's BM
Value proposition	Slight changes in products to meet the needs of the customers
Customer segment	No changes, BtoB and BtoC segments
Customer relationship	To make products adapted to social changes the company gathers Information from fairs and by discussing with their customers.
Channel	Actively explores potential new agents or importers. Website mainly in supporting role
Key activities	Company Is innovative in its production processes
Key resources	The new products demand some changes in the production line with new machinery.
Key partners	No changes
Revenue structure	No changes.
Cost structure	No changes.

Iddink's all-digital BM and scalable international platform were developed in harmony (Table 5). Iddink developed a new value proposition to serve the international market. The company has now . The internationalization of the BM is based on a replication principle that supports the learning processes. The basic BM principles are adapted to local circumstances. A core team is in place and there are country-specific teams. In principle, an agile approach is utilized to developing the platform as a Minimal Viable Product, based on continuous user validation, and innovating the BM in parallel. Currently, Iddink has a clear position in the ecosystem in every country where they are present. Iddink operates now two BMs in parallel, the old one and the new all-digital BM:

Table 5 BMI of Iddink

Business model component	Change in Iddink's BM
Value proposition	Radical change from a logistics provider (of school books) to an international digital platform provider.
Customer segment	New customer segments are explored, such as 3th party providers
Customer relationship	Increasing through the platform
Channel	From traditional physical delivery channels to a platform
Key activities	New key activity is to collect and analyse information and knowledge regarding customers and self-service behaviour
Key resources	New IT and data analytics capabilities required.
Key partners	Expands the international partner network based on mutual added value. Internationalization is boosted by an investor, which became one of the owners of the SME.
Revenue structure	Increasingly licencing, training, broker and usage fees.
Cost structure	The platform development costs are considerable

Laureti's BM was affected quite dramatically (Table 6). While the company's old value proposition was based on providing cheap labor to deliver mass production, the *new value proposition* involved tailored clothing and related services (including design, material selection, etc.). Initially, *customer segments* were not affected and the company continued to operate in the same market, with some of its key clients staying loyal. However, the decision to internationalize meant that *Laureti* had to rebuild its partner network, both for production as well as distribution and sales of the products. This opened up *new but traditional channels* for communication and service delivery. The main channel still primarily relied on face-to-face meetings, due to the complicated services that require rich interactive communication channels. The BM Innovation process is seen as a process of continuous iterations leading to small adjustments to the BM. The internationalization process at *Laureti* brought several important changes to the company's business model, including:

Table 6 BMI of Laureti

Business model component	Change in Laureti's BM
Value proposition	From providing sewing services towards providing specialist services under its own brand
Customer segment	From one primary customer to several international BtoB customers
Customer relationship	Deal by deal (previously one long-term relationship)
Channel	Direct f2f contact with new foreign clients. Website mainly to present the products, but company runs also a webshop.
Key activities	The process changed from manufacturing clothes based on incoming orders, to providing a package that includes design, technical drawing, material selection, sewing and delivery services. Company is investing for keeping up with technological changes related to the production process, such as cutting, sewing and design technologies. However, the newest equipment is too expensive for the company.
Key resources	The organization down-sized, only key specialists stayed.

Key partners	Less complex sewing activities were outsourced. Key partners are selected based on their (technical) capabilities reflecting the need to offer competitive and high value services.
Revenue structure	marketing services, such as website development and support, are outsourced.
Cost structure	Cost based pricing. Price level increased to cover the costs from higher quality.
	Strategic decision to focus on higher quality Increased costs around 30%.

The core component of the business model of the *traffapp* affected by internationalization is the company's partner network (Table 7). The development of a 'local' ecosystem is of the utmost importance: The company looks for similar but weaker app/platform providers to develop an alliance, and focuses mainly on media companies, for example RTL traffic in Luxembourg and alternative traffic platforms e.g., Touring AA in Belgium. The app is localized and branded by local representative and is exploited by the core provider. Governments are important, because they provide the relevant real-time traffic data used as input for the app. The company collaborates with governments to explore how the app and platform can be used to handle emergencies, traffic jams and traffic in general. Travel information is also provided by users, for instance information on speed cameras, while automated data is used to detect traffic jams after the app is installed. On the other hand, the core (technical) resources and capabilities are scalable, and multiple languages can be handled via the platform. White labels are to be used to create an international presence. The core value proposition, delivering real-time traffic information to drivers, radio stations and governments, remains unchanged. While the firm is mainly a tech provider, marketing requires additional (media) partners and investors. Company continuously relies on social media for contact with end-customers.

Table 7 BMI of Traffapp

Business model component	Change in traffapp's BM
Value proposition	No changes. Provision of real-time traffic information. White labels are to be used to create an international presence.
Customer segment	No changes. Drivers, radio stations and governments
Customer relationship	No changes. Social media is utilized
Channel	No changes. Platform is the main channel.
Key activities	No changes. Multiple languages can be handled via the platform
Key resources	No changes. The core (technical) resources and capabilities are scalable
Key partners	Building 'local' ecosystem in each country is of the utmost importance for the SME. Internationalization is boosted by an investor, which became one of the owners of the SME.
Revenue structure	No changes.
Cost structure	No changes.

Based on the discussion above, it can be concluded that the BM of mature firm Caramelos *Cerdán* has not changed a lot as a result of internationalization, because its traditional BM is still valid. The *traffapp*

has innovated a scalable, flexible BM, where only one component appears to be affected, i.e. finding local key partners when expanding operations to additional new markets. In *Laureti's* case, the BM redesign was due to external circumstances, while in the case of *Iddink*, a complete overhaul of the BM was based on clear strategic choices in response to changes in the market and the opportunities provided by platform technologies.

Iddink is the only case where the innovation of the BM is radical in nature. In all other cases, the BM Innovation due to internationalization starts with a changed or adapted Value Proposition, after which key partners, resources and activities need to be adjusted, the latter being core to BM innovation.

With the exception of *Caramelos Cerdán*, the companies all use BM ontologies and tools, albeit in different ways. *Caramelos Cerdán* only used SWOT analysis. *Laureti* used BM CANVAS for its strategic decision-making with regard to the re-design of its BM, while *Iddink* makes extensive use of different ontologies, e.g. CANVAS and STOF, and alternative tools in a dynamic and agile way. The BMI process is the most developed and structured in the *Iddink* who takes a rational and cognitive (learning) approach, where others adopt a more evolutionary approach.

In terms of performance, all companies capture considerable revenues from international markets or try to increase their international market share by reconsidering their BM. *Caramelos Cerdán* and *Laureti* obtain more than 50% of their revenues from international markets. Iddink's international revenues are also substantive. Since its platform implementation is ongoing, the impact on the company's performance is as yet difficult to determine, but it looks very positive, with 40% of the revenues currently being related to the digital platform. Recently (2020), the company was acquired by a major international publisher of educational material, thanks to its international footholds and success.

Our core findings with regard to our research model are summarized in table 8

Table 8 Summary and interpretation of results

	Mature firm	Start-Up
<i>Multi-language Web-based Channels</i>	<p>Internationalization strategy: emergent, based on opportunities</p> <p>BMI: Small changes in BM in each country</p> <p>Value proposition not changed, no customer segmentation, rely on traditional channels (agencies and importers), which are selected country by country.</p> <p>Web site mainly provides general information of the products and the company.</p> <p>Performance: more than 50% of the revenues comes from international markets</p>	<p>Internationalization strategy: emergent, based on opportunities</p> <p>BMI: Redesign of BM</p> <p>Value proposition has changed, segmentation towards higher market segments, no clear channel strategy.</p> <p>Web site provides general information of the products and the company, but also an on-line shop for consumers.</p> <p>Performance: more than 50% of the revenues comes from international markets</p>
<i>Digital platform</i>	<p>Internationalization strategy: deliberate strategy in which digital transformation plays a key role</p> <p>BMI: Parallel new platform-based BM</p> <p>Change in value proposition and in customer groups, major change in channel strategy.</p> <p>The multi-sided platform is the mean to provide the service to the customers and to engage other</p>	<p>Internationalization strategy: emergent, based on opportunities</p> <p>BMI: Small changes in BM in each country</p> <p>value proposition and customer segmentation unchanged, partner selection country by country, channel strategy is in place with a focus on social media.</p>

<p>key actors, such as content providers as complementors. Performance: more than 40% of the revenues comes from the new BM.</p>	<p>The mobile app and related platform are the means to provide the service to the customers. Performance: Trafficapp has an international foothold in most European countries. No data on revenues per country are available</p>
--	---

Discussion

To date, most studies on BMI have focused mainly on large firms (Dunford et al, 2010) or on hi-tech firms (Onetti et al., 2012). Apart from existing literature on Born Globals, to our knowledge, this chapter discuss internationalization and BMI within the context of small entrepreneurial companies using case study research. This chapter is unique by suggesting that, when it comes to internationalization, digitalization, such as use of digital platforms, can help in entering into new international markets. Digitalization has to involve more than just developing a multi-language website. As shown by De Reuver et al. (2013), IT-based internationalization approaches allow companies to be more in control, although they all require financial resources from investors, and SMEs require the necessary IT- knowledge resources, skills and capabilities to enable digital transformation.

The cases show that internationalization led to different type of changes in the BM. As was exemplified by one of our case companies - the minimum change in entering new markets is to find new partners in that country. If their type (such as agency or importer) is similar to what was utilized in the old BM, there may not be need for substantial changes in the BM. On the other hand, in other case companies we saw several changes to the BMs components, in addition to selection of and partnering with international key partners, also adjusting the value proposition, adapting key activities, adding digital channels and enabling alternative revenue models. In one of cases the innovation process led even to a radical new BM, next to the existing BM.

Interestingly enough, in the case SMEs the process of BM Innovation is rarely guided by a cognitive approach that is based on analysis and reflection (Berends, et al., 2016), but often involves an evolutionary approach based on trial and error, making small, but multiple, adjustments to the business model. Although BMI is never a linear process, the BM innovation process for the four cases shows some intrinsic communalities. The order in which components are changed can be compared to the business model innovation path identified by Heikkila et al. (2018) for companies aiming for growth. Typically, internationalization involves changes in the value proposition in combination with the product/service offering, after which resources and key activities need to be adjusted, leading to new partnerships/ecosystems. In parallel, changes in revenue model are realized. Specific resources, i.e., knowledge, language, managerial and human competencies, and sometimes even organizational changes, specifically in the traditional SMEs, are needed.

The statement by Casadesus-Masanell and Ricart (2010b), that there is no single path to internationalization, proves to be true. Based on our research, it is clear that some entrepreneurs are likely to replicate their BM country by country or engage in with incremental BM innovation when entering foreign markets. The companies that rely on IT to a larger extent are also the companies that focus on their value proposition. They would appear to adopt a more agile approach in their quest for flexibility, and play a more leading, orchestrating role within their ecosystem.

When we look at the background of the companies, age (established versus start-up) appears to be a far less important factor than IT maturity. While the two companies operating in more traditional industries (the candy manufacturer and the sewing services) have adopted a more responsive and less proactive approach to innovation and focus on their resources and partnership with existing suppliers, in the industries with less tangible nature of the products, digitalization plays a more central role in internationalization strategy.

Conclusion and limitations

This chapter provides insights into the importance of the use of IT and digitalization, specifically in terms of developing platforms, in relation to internationalization. It provides additional insights into the way entrepreneurs approach internationalization and the relationship with BM Innovation. Of the existing theories on internationalization, the evolutionary (Uppsala) model, Institutional theory and the concepts related to effectuation and risks helped us understand why and how BM changes.

Operating in different industries SMEs are driven by different motives to internationalize their markets and do not follow a clear strategy but rather act on the basis of opportunities. They follow quite diverse and mainly incremental BM innovation patterns, based on a trial-and-error approach, changing the value proposition and adjusting key activities and resources. Of the studied companies the traditional candy manufacturer company with tangible products and the digital traffic platform provider appear to be the least engaged in BM innovation. In the case of the start-up sewing services company, there were quite drastic changes to BM components, even though the internationalization process itself is quite traditional, while the education logistic providers changed developed parallel BM's, i.e. established or start-up. In all cases, BM Innovation is considered to be important and contributes to (perceived) increased performance.

The results of this study implies that in internationalization the importance of using IT is underestimated. Not only the role of digitalization is under-researched, but, in practice, it also goes way beyond having an international multi-language website. Internationalization and digitalization include embedding IT in the business processes and operations (Solaimani et al., 2018; Verhagen et al., 2021), in addition to developing a portal/e-marketplace or platform. Especially the platform perspective requires further research from an internationalization perspective.

This study has some limitations. To begin with, the number of cases is limited and, consequently, diversity in relation to industry, type of products, international markets pursued, knowledge and available financial resources, may need further consideration. It is clear that our findings cannot simply be projected on a larger population of entrepreneurs engaged in internationalization and BM Innovation, so further research is needed.

Acknowledgements

This chapter is inspired by an original idea as proposed by Rimantas Gatautis (Kaunas University of Technology, Lithuania), who sadly passed away. In 2018.

The work leading to these results has received funding from the European Community's Horizon 2020 Programme (2014-2020) under grant agreement 645791.

References

- Afuah, A., & Tucci, C.L. (2002). *Internet Business Models: A Strategic Management approach*. New York: Mc-Graw-Hill.
- Al-Debei, M. M., & Avison, D. (2010). Developing a unified framework of the business model concept. *European Journal of Information Systems*, 19(3), 359-376. <https://doi.org/10.1057/ejis.2010.21>
- Ammar, O., & Chereau, P. (2018). Business model innovation from the strategic posture perspective: An exploration in manufacturing SMEs. *European Business Review*, Vol. 30(1), 38-65. <https://doi.org/10.1108/EBR-09-2016-0119>
- Andersen, O., & Buvik, A. (2002). Firms' internationalization and alternative approaches to the international customer/market selection. *International Business Review*, 11(3), 347-363. [https://doi.org/10.1016/S0969-5931\(01\)00064-6](https://doi.org/10.1016/S0969-5931(01)00064-6)
- Arbussa, A., Bikfalvi, A., & Marquès, P. (2017). Strategic agility-driven business model renewal: the case of an SME. *Management Decision*, 55(2), 271-293. <https://doi.org/10.1108/MD-05-2016-0355>
- Autio, E. (2017). Strategic entrepreneurial internationalization: A normative framework. *Strategic Entrepreneurship Journal*, 11(3), 211-227. <https://doi.org/10.1002/sej.1261>
- Berends, H., Smits, A., Reymen, I. & Podoyntsina, K. (2016). Learning while (re-)configuring: Business Model Innovation in established firms. *Strategic Organization*, pp. 1-39. <https://doi.org/10.1177/1476127016632758>
- Bouwman, H., Haaker, T., & De Vos, H. (2008). *Mobile service innovation and business models*. Heidelberg: Springer.
- Bouwman, H., Nikou, S., & de Reuver, M. (2019). Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs?. *Telecommunications Policy*, 43(9), 101828. <https://doi.org/10.1016/j.telpol.2019.101828>
- Casadesus-Masanell R., & Ricart, J.E. (2010). From strategy to business models and onto tactics. *Long Range Planning*, 43(2-3), 195-215. <https://doi.org/10.1016/j.lrp.2010.01.004>
- Casadesus-Masanell, R., & J. Ricart, J.E. (2010b). Competiveness: business model reconfiguration for innovation and internationalization. *Management Research. The Journal of the Iberoamerican Academy of Management*. Vol. 8 (2) 123-149. <https://doi.org/10.1108/1536-541011066470>
- Chereau, P. and Meschi, P.-X. (2019). The performance implications of the strategy–business model fit. *Journal of Small Business and Enterprise Development*, Vol. 26(3), 441-463. <https://doi.org/10.1108/JSBED-04-2018-0122>
- Chesbrough, H., & Rosenbloom, R. 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*, 11(3), 529-555. <https://doi.org/10.1093/icc/11.3.529>

- Child, J., & Hsieh, L. H. (2014). Decision mode, information and network attachment in the internationalization of SMEs: A configurational and contingency analysis. *Journal of World Business*, 49(4), 598-610. <https://doi.org/10.1016/j.jwb.2013.12.012>
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design & analysis issues for field settings*. Boston: Houghton Mifflin.
- Creswell J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- De Reuver, M., Bouwman, H. & MacInnes, I. (2009). Business Model Dynamics for start-ups and innovating eBusinesses. *International Journal of Electronic Business*, 7(3), 269-28. <https://doi.org/10.1504/IJEB.2009.02653>
- De Reuver, M., H. Bouwman & T. Haaker (2013). Business model roadmapping: A practical approach to come from an existing to a desired business model. *International Journal of Innovation Management*. Vol. 17, no. 1, pp. 1-18. <https://doi.org/10.1142/S1363919613400069>
- De Reuver, M., Sørensen, C., & Basole, R. C. (2017). The digital platform: a research agenda. *Journal of Information Technology*, 1-12. <https://doi.org/10.1057/s41265-016-0033-3>
- Dunford, R., Palmer I., & Benveniste, J. (2010). Business Model replication for Early and rapid Internationalization. *Long Range Planning*, Vol. 43(5-6), 655-674. <https://doi.org/10.1016/j.lrp.2010.06.004>
- Eckhardt, J. T. and Shane, S. A. (2003). Opportunities and entrepreneurship. *Journal of Management*, 29(3), 333-349. <https://doi.org/10.1177/014920630302900304>
- Eisenhardt, K. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532-550. <https://doi.org/10.2307/258557>
- El Sawy, O. A., & Pereira, F. (2012). *Business modelling in the dynamic digital space: An ecosystem approach*. Springer. <https://doi.org/10.1007/978-3-642-31765-1>
- Eriksson, T., Heikkilä, M., & Nummela, N. (2021). Crafting SME Business Model for International Expansion with Data-Driven Services, in Nielsen, C., Marinova, S. & Marinov, M. (eds.) *Business Models and Firm Internationalisation*, (pp. 137-151), Routledge. <https://doi.org/10.4324/9781003204268>
- Eriksson, T., Heikkilä, M., & Nummela, N. (2022). Business model innovation for resilient international growth. *Small Enterprise Research*, 29(3), 205-226 <https://doi.org/10.1080/13215906.2022.2092890>
- Eriksson, T., Nummela, N. & Heikkilä, M., (2023). Data-driven Business Model Innovation – When is Decoupling Necessary? In marinova, S. & Marinov, M. (eds.) *Reconfiguration of Business Models and Ecosystems - Decoupling and Resilience*, Routledge.
- Eurofound (2012). Born global: The potential of job creation in new international businesses, Publications Office of the European Union, Luxembourg. Available from <https://www.eurofound.europa.eu/publications/report/2013/born-global-the-potential-of-job-creation-in-new-international-businesses> (accessed 21.12.2022)

- Evers, N., & O’Gorman, C. (2011). Improvised internationalization in new ventures: The role of prior knowledge and networks. *Entrepreneurship & Regional Development*, 23(7-8), 549-574. <https://doi.org/10.1080/08985621003690299>
- Francioni, B. , Musso, F., & Vardiabasis, D. (2013). Key decisions and changes in internationalization strategies. The case of smaller firms, *Journal of Strategic Marketing*, 21(3), 240-259. <https://doi.org/10.1080/0965254X.2013.790466>
- Gatautis, R., Vaiciukynaite, E., & Tarute, A. (2019). Impact of business model innovations on SME’s innovativeness and performance. *Baltic Journal of Management*. 14(4), 521-539. <https://doi.org/10.1108/BJM-01-2018-0035>
- Gawer, A. (ed.) (2009). *Platforms, Markets and Innovation*. Edward Elgar.
- Gawer, A. (2014). Bridging Differing Perspectives on Technological Platforms: Toward an integrative framework. *Research Policy*. Vol. 43 (7): 1239–1249. <https://doi.org/10.1016/j.respol.2014.03.006>
- Ghemawat, P. (2007). *Redefining global strategy*. Boston: Harvard Business School Publishing.
- Ghemawat, P. (2011). *World 3.0. Global prosperity and how to achieve it*. Boston: Harvard Business Press Books.
- Glaser, B. G., & Strauss, A. L. (1967). *Discovery of grounded theory: Strategies for qualitative research*. Aldine Publishing Company.
- Heikkilä, M., Bouwman, H., & Heikkilä, J. (2018). From Strategic Goals to Business Model Innovation Paths: an exploratory study. *Journal of Small Business and Enterprise Development*, Vol. 25 (1), 107-128. <https://doi.org/10.1108/JSBED-03-2017-0097>
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of international business studies*, 8(1), 23-32. <https://doi.org/10.1057/palgrave.jibs.8490676>
- Johanson, J. and Vahlne, J.E. (1990). The mechanism of internationalization. *International Marketing Review*, 7(4), 11–24. <https://doi.org/10.1108/02651339010137414>
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm—four Swedish cases. *Journal of management studies*, 12(3), 305-323. <https://doi.org/10.1111/j.1467-6486.1975.tb00514.x>
- Knight, G. (2015). Born global firms: Evolution of a contemporary phenomenon. *Entrepreneurship in international marketing*, 25, pp. 3-19. <https://doi.org/10.1108/S1474-797920140000025001>
- Kontinen, T., & Ojala, A. (2011). Network ties in the international opportunity recognition of family SMEs. *International Business Review*, 20(4), 440-453. <https://doi.org/10.1016/j.ibusrev.2010.08.002>
- Mainela, T., Puhakka, V. and 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. <https://doi.org/10.1111/ijmr.12011>

- McDougall, P.P. (1989). International versus domestic entrepreneurship: new venture strategic behavior and industry structure. *Journal of Business Venturing*, 4(6), 387-400. [https://doi.org/10.1016/0883-9026\(89\)90009-8](https://doi.org/10.1016/0883-9026(89)90009-8)
- McDougall, P. P., Shane, S. and Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research, *Journal of Business Venturing*, 9(6), 469–487. [https://doi.org/10.1016/0883-9026\(94\)90017-5](https://doi.org/10.1016/0883-9026(94)90017-5)
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage publications.
- Musso, F. & Francioni, B. (2012). How do smaller firms select foreign markets?, *International Journal of Marketing Studies*, Vol. 4 No. 6, pp. 44-53. <https://doi.org/10.5539/ijms.v4n6p44>
- Musso, F., & Francioni, B. (2014). International strategy for SMEs: Criteria for foreign markets and entry modes selection. *Journal of Small Business and Enterprise Development*, 21(2), 301–312. <https://doi.org/10.1108/JSBED-10-2013-0149>
- de Oliveira Santini, F., Kretschmer, C., & Marconatto, D. A. B. (2020). Antecedents, consequents and moderators of business models in SMEs: a meta-analytical research study. *Journal of Small Business & Entrepreneurship*, 1-32. <https://doi.org/10.1080/08276331.2020.1801295>
- Onetti, A., Zuchella, A., Jones, A.V., & McDougall-Covin, P.P. (2012). Internationalization, Innovation and entrepreneurship: business models for new-technology based firms. *Journal of Management and Governance*, 16, 337-368. <https://doi.org/10.1007/s10997-010-9154-1>
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers*. John Wiley & Sons.
- Papadopoulos, N., & Denis, J. E. (1988). Inventory, taxonomy and assessment of methods for international market selection. *International Marketing Review*, 5(3), 38-51. <https://doi.org/10.1108/eb008357>
- Pati, R. K., Nandakumar, M. K., Ghobadian, A., Ireland, R. D., & 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. <https://doi.org/10.1016/j.lrp.2018.01.001>
- Paul, G. (1993). Approaches to abductive reasoning: an overview. *Artificial intelligence review*, 7(2), 109-152. <https://doi.org/10.1007/BF00849080>
- Pepe, C., & Musso, F. (2003, September). The international opening of small district firms. Flexibility vs. consolidation in channel relations. Proceedings of the Conference on Clusters, Industrial Districts and Firms: The Challenge of Globalization, Modena.
- Porter, M. E. (1996). What is strategy? *Harvard business review*, nov-dec.
- Priem, R. L., Wenzel, M., & Koch, J. (2018). Demand-side strategy and business models: Putting value creation for consumers center stage. *Long range planning*, 51(1), 22-31. <https://doi.org/10.1016/j.lrp.2017.07.007>

- Pucihar, A., Lenart, G., Kljajić Borštnar, M., Vidmar, D., & Marolt, M. (2019). Drivers and outcomes of business model innovation—Micro, small and medium-sized enterprises perspective. *Sustainability*, 11(2), 344. <https://doi.org/10.3390/su11020344>
- Pucci, T., Nosi, C., & Zanni, L. (2017). Firm capabilities, business model design and performance of SMEs. *Journal of Small Business and Enterprise Development*, 24(2), 222-241. <https://doi.org/10.1108/JSBED-09-2016-0138>
- Rachinger, M., Rauter, R., Müller, C., Vorraber, W., & Schirgi, E. (2019). Digitalization and its influence on business model innovation. *Journal of Manufacturing Technology Management*, 30(8), 1143-1160. <https://doi.org/10.1108/JMTM-01-2018-0020>
- Rask, M. (2014). Internationalization through business model innovation: in search of relevant dimensions and elements. *Journal of International Entrepreneurship*, 12, 146-161. <https://doi.org/10.1007/s10843-014-0127-3>
- Rasmussen, E. S., & Madsen, T. K. (2002, December). The born global concept. In Paper for the EIBA conference.
- Remane, G., Hanelt, A., Nickerson, R. C., & Kolbe, L. M. (2017a). Discovering digital business models in traditional industries. *Journal of Business Strategy*. Vol 38, no. 2, pp. 41-51 <https://doi.org/10.1108/JBS-10-2016-0127>
- Remane, G., Hanelt, A., Tesch, J. F., & Kolbe, L. M. (2017b). The business model pattern database—a tool for systematic business model innovation. *International Journal of Innovation Management*, 21(01), 1750004. <https://doi.org/10.1142/S1363919617500049>
- Rennie, M. W. (1993). Global competitiveness: Born Global. *McKinsey Quarterly*, (4), 45-52.
- Ruzier, M., Hisrich, R., & Antoncic, B. (2006). SME internationalization research: past, present, and future, *Journal of Small Business and Enterprise Development*, 13(4), 476 – 497. <https://doi.org/10.1108/14626000610705705>
- Sainio, L., Saarenketo, S., Nummela, N. & Eriksson, T. (2011). Value creation of an internationalizing entrepreneurial firm. *Journal of Small Business and Enterprise Development*, 18(3), pp. 556–570. <https://doi.org/10.1108/14626001111155709>
- Santos, J.C., Baradas, H.K. & Martin F.V. (2015). Different perspectives on Internationalization Research: a Bibliometric Review. *Revista Ibero-Americana de Estratégia*. 14(4), 93-118. <https://doi.org/10.5585/ijsm.v14i4.2263>
- Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243-263. <https://doi.org/10.2307/259121>
- Solaimani, S., Heikkilä, M., & Bouwman, H. (2018). Business model implementation within networked enterprises: A case study on a Finnish pharmaceutical project. *European Management Review*, 15(1), 79-96. <https://doi.org/10.1111/emre.12124>

- Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. (2010). Business model innovation through trial-and-error learning: The Naturhouse case. *Long range planning*, 43(2-3), 383-407.
<https://doi.org/10.1016/j.lrp.2010.02.003>
- Strauss, A., & Corbin, J. (1990). *Basics of Qualitative Research. Grounded Theory, Procedures and Techniques*. Sage publications
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology. *Handbook of qualitative research*, 17(1), 273-285.
- Teece, D. (2010). Business Models, Business strategy and Innovation. *Long Range Planning*, 43 (2-3), 172-194. <https://doi.org/10.1016/j.lrp.2009.07.003>
- Thomas, L., Autio, E. and Gann, D. (2014). Architectural Leverage: Putting platforms in context. *The Academy of Management Perspectives*, 28 (2), 198–219. <https://doi.org/10.5465/amp.2011.0105>
- Tilson, D., Sorensen, C., & Lyytinen, K. (2012, January). Change and control paradoxes in mobile infrastructure innovation: the Android and iOS mobile operating systems cases. In *System Science (HICSS), 2012 45th Hawaii International Conference on* (pp. 1324-1333). IEEE.
<https://doi.org/10.1109/HICSS.2012.149>
- Timmers, P. (1998). Business models for electronic markets. *Electronic markets*, 8(2), 3-8
- Tiwana, A., Konsynski, B., & Bush, A. A. (2010). Research commentary—Platform evolution: Coevolution of platform architecture, governance, and environmental dynamics. *Information systems research*, 21(4), 675-687. <https://doi.org/10.1287/isre.1100.0323>
- Yamin, M., & Sinkovics, R. R. (2006). Online internationalisation, psychic distance reduction and the virtuality trap. *International Business Review*, 15(4), 339-360.
<https://doi.org/10.1016/j.ibusrev.2006.03.002>
- Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications.
- Verhagen, M., de Reuver, M., & Bouwman, H. (2021). Implementing Business Models Into Operations: Impact of Business Model Implementation on Performance. *IEEE Transactions on Engineering Management*. <https://doi.org/10.1109/TEM.2020.3046365>
- Veit, D., Clemons, E., Benlian, A., Buxmann, P., Hess, T., Kundisch, D., Leimeister, M., Loos, P. & Spann, M. (2014). Business models. *Business & Information Systems Engineering*, 6(1), 45-53.
<https://doi.org/10.1007/s12599-013-0308-y>
- von Delft, S., Kortmann, S., Gelhard, C., & Pisani, N. (2019). Leveraging global sources of knowledge for business model innovation. *Long range planning*, 52(5), 101848.
<https://doi.org/10.1016/j.lrp.2018.08.003>
- Zahra, S. A., & Garvis, D. M. (2000). Entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5), 469–492.
[https://doi.org/10.1016/S0883-9026\(99\)00036-1](https://doi.org/10.1016/S0883-9026(99)00036-1)

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. <https://doi.org/10.1002/smj.642>

Zott, C. & Amit, R. (2010). Business Model design: an activity system perspective. *Long Range Planning*, 43(2-3), pp 216-226. <https://doi.org/10.1016/j.lrp.2009.07.004>

Zott C., Amit R., & Massa. L. (2011). The Business Model: Recent Developments and Future Research. *Journal of Management* 37(4), 1019-1042. <https://doi.org/10.1177/0149206311406265>