# The next frontier of Digital Business Model Innovation

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**Abstract**

Firms are increasingly shaken by the challenges triggered by today's unpredictable landscapes. In this context, they are constantly searching for new ways to address fast-moving marketplaces more rapidly and with greater flexibility. This chapter investigates how strategic agility helps organizations innovate their digital business models to adapt to changing market conditions. To this end, we perform an exploratory single-case study focusing on *Clickio*, a leading firm in programmatic marketing that offers innovative technological solutions for digital publishers. This study provides a structured analysis of how strategic agility assists firms in accomplishing digital business model innovation across three intertwining dimensions – the business model's content, structure, and governance. Our study may support managers seeking to redefine their digital business model by learning more about how strategic agility can be embedded into their strategic and operational efforts to develop a more significant digital value proposition, and adapt to the uncertainty of today's shifting business contexts more effectively.

**Keywords:** strategic agility; digital business model innovation; single-case study; digital transformation.

## Introduction

Today, increasing global competition and challenges posed by the phenomenon of Digital Transformation have triggered in-depth changes in firms' products, roles, structures, and interactions and in specific business model innovation (BMI) (Cennamo et al., 2020; Chesbrough, 2010; Foss & Saebi, 2017; Hess et al., 2016; Verhoef et al., 2021).

People constantly use digital tools to share and receive real-time experiences and information (Islam et al., 2020; Zheng et al., 2020). In this regard, companies increasingly profit from adopting digital technologies to reconfigure their relationship with customers, revenue models, and operations and accomplish new value creation opportunities (Parida et al., 2019; Rydén & El Sawy, 2019; Visnjic et al., 2018). Research on BMI raises the need for firms to look for ways to innovate and adapt to the new patterns and makeup of the marketplace with greater flexibility and quickness (Brand et al., 2019; Chen et al., 2015; Cucculelli & Bettinelli, 2015; Tavoletti et al., 2021). Scholars particularly outline the importance of upgrading skills and competencies to address fast-changing environmental dynamics better and enhance competitiveness (Bresciani et al., 2021). Other scholars assume that the ability to innovate BMs in response to major changes in the external environment may be a key dynamic capability (Zott et al., 2011). Among the core dynamic capabilities required in the digital transformation era, recent studies highlight the prominence of agility (Bresciani et al., 2021; Warner and Wäger, 2019). Agility is the firm's capacity to manage uncertainty, to seize market opportunities, and reconfigure its resources in a timely fashion for greater customer value (Sambamurthy et al., 2003; Teece, 2010; Teece et al., 2016).

In particular, the role of agility as a key driver for BMI has been recognized in the literature under the concept of strategic agility, which encompasses three meta-capabilities (strategic sensitivity, leadership unity, and resource fluidity) necessary to accelerate BM renewal (Doz & Kosonen, 2010). However, our understanding about how strategic agility helps organizations to innovate and adapt their digital BMs to the changing conditions of the market is still limited (Battistella et al., 2017; Schneider and Spieth, 2013; Spieth et al., 2014; Rachinger et al., 2019; Verhoef et al., 2021). Prior literature has explored different types of capabilities in the context of digital transformation, e.g., team-specific cognitions, big data analytics, or networking capabilities (Ciampi et al., 2021; Hadjielias et al., 2021; Vrontis et al., 2020), and the mechanisms through which such capabilities elicit innovation outcomes. Nevertheless, we still have little empirical and theoretical knowledge concerning the impact of strategic agility on digital BMI (Warner and Wäger, 2019).

In this chapter, we attempt to answer the following research question: "How strategic agility enables organizations to innovate their digital business models?" We conduct an exploratory single-case study (Eisenhardt 1989; Miles and Huberman 1984; Yin 1994), focusing the attention on the

case of *Clickio*, a leading firm in programmatic marketing that offers innovative technological solutions for digital publishers.

By extending the literature on agility and BMI, our findings offer a structured analysis of the different ways in which strategic agility assists firms in accomplishing digital BMI to develop a more significant digital value proposition in shifting business contexts. This chapter has crucial implications for practice. It may help managers seeking to redefine their digital BM by learning more about how strategic agility can be embedded into their strategic and operational efforts to adapt to the uncertainty of today's complex and fast-changing landscape more effectively.

## Theoretical Background

### *Business models and digital business model innovation*

A BM is generally defined as a set of structured and interdependent elements through which organizations create and deliver value to customers (Zott et al., 2011). It encompasses the relationships between a firm and its overall stakeholders (e.g., customers, suppliers), as well as its internal units and departments (e.g., units, staff, teams), articulated in procedures and action routines (Battistella et al., 2017). Hence, a BM epitomizes the overall business architecture and related mechanisms set around a firm's value proposition generated to acquire target customers and entice them to pay, eventually converting these payments to profit (Foss and Saebi, 2018; Magretta, 2002; Teece, 2010).

Early management studies conceived BMs as a bundle of stable practices and ways of performing to ensure efficiency (Siggelkow, 2002). Their archetypes described well-known business logic that explains value creation, delivery, and capture mechanisms across industry contexts (Baden-Fuller and Morgan, 2010). Over time, scholars have started to recognize that the elements composing a firm's BM are not hard to change; instead, they evolve and continuously interact with each other to enhance a firm's sustained competitive advantage (Cavalcante, 2014; Doz and Kosonen, 2010; Magretta, 2002).

The shifting from conventional BMs to more dynamic BMs has been sharpened by the growing adoption of digital technologies in business contexts, and the recent trend of digitization of products and services, which strongly influenced changes in customer expectations and firm's capacity to generate revenues and earn profits (El Sawy and Pereria, 2013). Today, it is highly important for firms' survival and success to continuously reconfigure BMs (Johnson et al., 2008) to take advantage of new value-creating opportunities and modify BMs effectively and in a timely manner when an opportunity or threat arises. Moreover, the persistent re-examination of BMs helps to maintain

innovativeness and reduces the risk of inertia towards change which often occurs when a company has been successful with the same strategy over time (Achtenhagen et al., 2013).

A growing research stream is related to Business Model Innovation (BMI) (Schneider & Spieth, 2013; Teece, 2010; Zott et al., 2011), delineating those "novel, non-trivial changes to the key elements of a firm's business model and/or the architecture linking these elements" (Foss and Saebi, 2018; p. 201). The innovations in such elements affect a firm's value creation, delivery, and capture and are important sources of competitive advantage as they are difficult to be imitated by others (Rachinger et al., 2019).

Digitalization is considered an important driver of BMI. Indeed, it is with digitalization that firms seek to "reinvent" their BM, e.g., redesigning or experimenting with new products and services, rethinking value proposition, reconfiguring value delivery models, or reorganizing processes (Westerman et al., 2014). Employing technology within a firm's BM considerably amplifies its ability to discover new growth opportunities to satisfy latent customer needs (Teece, 2010). Furthermore, by leveraging digital technologies, firms have progressively revolutionized their relationship with customers, suppliers, and overall business network (Pagani and Pardo, 2017; Schallmo et al., 2017). Technologies increase virtual touchpoints with customers and facilitate market entry (Verhoef et al., 2021).

Scholars define digital BMs as "the underlying business logic deliberately acknowledges the characteristics of digitization and takes advantage of them, both in interaction with customers and business partners, and in its internal operation" (Bärenfänger and Otto, 2015, p. 18). A digital BM's value proposition may articulate in the following dimensions: *content* (the selection of activities to be performed), *structure* (the way such activities are performed), and *governance* (who perform these activities) (Amit & Zott, 2012). In this conception, BMI occurs when at least one of these elements is set in a novel way (Zott, 2016). According to scholars, digital BMI can be driven by several factors including, for instance, the *novelty* of the activity system, the *lock-in* mechanisms that create switching costs, the set of *complementarities* that connect different BM elements, and the *efficiency* which saves the costs of those interactions (Zott & Amit, 2017). With this study, we deepen the mechanisms through which strategic agility impacts digital BMI.

### *Agility*

Agility originates as a software development methodology aimed at developing software adjusted to customers' needs (Lee & Xia, 2010; Lindstrom & Jeffries, 2004). Teams work closely with users, make tests in short iterative cycles, and continuously update projects based on users'

feedback to deliver high-quality and timely innovations (Bianchi et al., 2020; Chan & Thong, 2009; Cooper, 2014).

Today, agility is viewed as a crucial capability to thrive and succeed in unpredictable business contexts (Prange, 2021). Agility epitomizes the dynamic capability to manage uncertainty (Teece et al., 2016), to "detect and seize market opportunities with speed and surprise" (Sambamurthy et al., 2003; p. 238). In particular, agility concerns the ability to modify and reconfigure existing assets and capabilities continuously, change the way of doing business, and enhance customer value creation (Lee et al., 2015; Lu & Ramamurthy, 2011; Rigby et al., 2016; Tallon & Pinsonneault, 2011; Teece, 2010), which is vital for firms' survival. Indeed, to navigate dynamic and unpredictable markets, firms need to be flexible to intensified competition and technological turbulence (Chakravarty et al., 2013; Lee et al., 2015). Firms displaying agility are able to constantly look for new ways to adapt to fluctuations in the market demand rapidly (Moi & Cabiddu, 2021a, 2021b). From a practical perspective, agility occurs in multiple ways, including faster product-service delivery, quicker decision-making processes, and the delivery of higher product or service quality (Mahadevan et al., 2019).

Despite the significant scholarly insights into the importance of agility and its implications for business strategy and performance, research on the relationship between strategic agility and BMI is still evolving. Scholars conceptualize strategic agility as a useful tool to innovate BM, consisting of 'thoughtful and purposive interplay' between three dimensions: strategic sensitivity (the ability to perceive strategic developments), leadership unity (the ability to engage top managers to commit toward changes); and resource fluidity (the internal ability to quickly reconfigure and redeploy resources) (Doz & Kosonen, 2010, p.371). Firms with strategic sensibility develop a sense of the future development of the market, for example, by participating in experiments and exploring different configurations of future products. Moreover, by building on careful evaluation of the current business model and its core competencies, firms are implementing additional business solutions that redefine the concept of the BM entity. Leadership unity is the cornerstone of BMI because, without the collective commitment of all top managers to the new model, it is difficult to bring about the desired change. Only through respectful dialogue, empowerment, compassion, and clear communication of the importance of the "everyone on board" attitude can BM be reconfigured effectively. And ultimately, firms need to ensure that they have the resources to implement the new BM. Since firms are often involved in complex processes and operations difficult to be changed, the ability to quickly and without damage to reallocate the necessary resources will provide structural flexibility that is required for BMI. Despite the recognition from the literature of the importance of strategic agility to innovate their BMs (Doz & Kosonen, 2010), research about the impact of strategic

agility on digital BMI is still in its infancy (Verhoef et al., 2021). To address this gap, in the following sections, we will empirically explore the mechanisms through which strategic agility contributes to innovating the *content*, *structure*, and *governance* of a firm's digital BM (Amit & Zott, 2012).

## Methodology

Since little is known about the relationship between strategic agility and digital BMI, the present study adopts an exploratory single-case study research design (Eisenhardt, 1989; Miles and Huberman, 1984; Yin, 1994). Such a methodology allows us to investigate the topic in a real-world setting and get in-depth empirical insights useful to build a robust theoretical inference (Dyer Jr & Wilkins, 1991; Eisenhardt, 1989) generalized via analytical reasoning (Yin, 2013).

### *Case selection*

We opted for a purposive sampling approach, according to which the case study is strategically chosen based on its information richness and helpfulness concerning the phenomenon investigated (Patton, 2005). Since our research focused on digital BMs, we looked for a case study operating in the digital industry as a suitable research setting for addressing the theoretical purposes and research questions of this study. The further selection criterion was represented by the firm's implementation of strategic agility, encountered by one of the three authors that collaborate with the firm and have a privileged view of the internal processes. For example, the fast decision of the owner to implement the GDPR Consent Tool solution to react to the new European Union GDPR initiative that directly impacted the digital BMs of many enterprises (Ziegler et al., 2019) may be related to leadership unity. Following these criteria, we identified *Clickio* as a remarkable case for our study that would allow us to conduct empirical qualitative research on strategic agility in the digital BMI domain.

Clickio is a leading international firm in programmatic marketing, with representatives in Russia, Italy, and the United Kingdom. It was founded in 2015 by a team of 5 people. Currently, it has more than 70 employees serving over 500 clients globally. Clickio is a platform that provides digital publishers with innovative solutions that help their sites grow efficiently and sustainably and represents the first Google Certified Publishing Partner in Italy and Russia. In 2018, Clickio significantly innovated its BM by developing a Consent Management Platform, offering it free of charge to all digital publishers.

### *Data collection*

To ensure comprehensive coverage of the phenomenon investigated, we triangulated data from multiple sources (Eisenhardt, 1989; Miles & Huberman, 1984). We collected primary data through

participant and non-participant observations during meetings and team-building events. As one of the co-authors had a role of a participant as an observer and was involved in the firm's activities during the whole period of the research, we embraced a deep understanding of our research setting (Dyer Jr & Wilkins, 1991; Hammersley & Atkinson, 2019). Primary data also included in-depth interviews with key informants who were highly knowledgeable in the field (Eisenhardt and Graebner, 2007). Interviews followed a semi-structured interview protocol (Strauss & Corbin, 1998). Examples of guiding interview questions were as follows: How do you organize the firm to create and deliver your value proposition to your customers? Which process do you follow when developing a new product?

Interviews were properly recorded, transcribed, and coded through NVivo 10 software. The interviews were conducted in June 2021, with each interview lasting between 35 and 65 minutes (Table1).

**Table 1.** Summary of the primary data sources

| **Primary data sources** | **Description** |
|---|---|
| In-depth interviews | 3 Semi-structured interviews were conducted with the Commercial Director (65 minutes), the Director of Commercial Operations (36 minutes), and the Publisher Development Director (46 minutes). |
| Field notes from observations | During the research period, the field researcher produced qualitative data recorded in an observation diary. |

Secondary data were collected through the company's website, blog, social media accounts, and press releases. Such data were gathered via NCapture, the browser application of NVivo.

### *Data analysis*

When analyzing the data, we were guided by abductive reasoning, since some aspects of our research problem are already grounded in the existing literature, while others are hidden (Bandara et al., 2015). Thus, we approached the data inductively when looking for evidence of how strategic agility impacts digital BMI, while aggregate dimensions, namely structure, governance, and content (Amit & Zott, 2012) were established deductively from the BMI literature.

We based our analysis on moves of the categorization process (Grodal et al., 2020). At first, we approached data by identifying relevant concepts via open coding (Gibbs, 2007). Second, we iteratively analyzed data by dropping, merging, splitting, and relating categories. During this coding stage, we triangulated secondary data with previously identified categories. First-order concepts were then grouped around a set of second-order categories to view data at a higher level of abstraction until reaching a saturation point (Strauss & Corbin, 1998). Finally, we grouped second-order concepts into

overarching dimensions that captured the most important elements in a BMI process: structure, governance, and content (Amit & Zott, 2012). See examples of this process in Table 2.

Two co-authors performed the whole coding process independently and simultaneously. During each coding step, we ran a Coding Comparison Query. We discussed any inconsistencies until achieving a Kappa coefficient higher than 0.80 (Miles & Huberman, 1984).[1]

**Table 2.** Data analysis process (code examples)

| 1st coding stage | 2nd coding stage | Aggregate dimension |
|---|---|---|
| ▪Providing constant human support in approaching customers<br>*"From a commercial point of view, it is very important that we provide a personal account manager, a point of reference with a person. Many companies offer the same services, same products, platforms but no personal contact. While with us every publisher is followed personally, so all the solutions we offer are designed for this publisher. It is a personal approach that, in my opinion, distinguishes us. Offering a personal account manager in our times is not done by all, and we want to keep the same personalization, the same human approach when expanding on new markets (…) we are all on web, we are all online, but at the same time we are all people, we want to keep this model"* (Director of Commercial Operations)<br>"*Whether it's related to an issue on the site, advice on strategy or a simple question on industry trends, your personal account manager will be on hand to help*" (Clickio's website) | Human-like approach | Structure |
| ▪Implementing co-creative processes during product development to enhance overall customer experience<br>*"Therefore, I ask many questions to know the reality of the person in front of me, because, based on my knowledge of the company's tools or the expertise gained over the years, I could have solutions for their needs or simply receive input from them and, therefore, become a trait d'union* [connection point] *with the company and bring back what the market needs internally"* (Publisher Development Director)<br>"*There is always a beta-testing phase where we offer a product for free to a part of our trusted publishers (...) at the end of the beta testing period, we collect the feedback from them (...) so that we see if there are any improvements to be made, changes to be applied to the product itself.*" (Director of Commercial Operations) | Customer engagement in product development | Governance |

[1] Kappa coefficient measures the degree of agreement between coders. A value close to 1 corresponds to "excellent agreement", whereas a value of 0 (or less) indicates disagreement between coders.

| | | |
|---|---|---|
| ▪Making operations, interactions, and product usage easier and accessible to all customers<br>*"To understand how much he* [publisher] *earns, he needs to consult two or three different places* [platforms]*, take the calculator, and do the sum to understand how much he earns with advertising. As a solution, we have thought to collect all this data in one place and offer this product which is called (Unified Reporting) to the publisher. It is much easier for him to have all the data collected from various sources in a single report"* (Director of Commercial Operations)<br>"*We have restructured and added a lot of information (...) but also modified it and trying to translate it, let's say, for the publisher*" (Commercial Director) | All-embraced simplification | Content |
| ▪Ensuring idea-sharing and effective communication across the teams<br>*"Within the team, we communicate daily, hourly I would say (...)in the sense that we always confront the ideas during the informal and weekly meetings"* (Publisher Development Director)<br>*"We use various tools (...) we are all on the web, despite the work from home or office (…) all our data and all our tools are online. We use Slack, where we create various communication channels with various groups and thematic issues, so we are able to communicate between and with-in teams very quickly"* (Director of Commercial Operations) | Cross-team engagement | Governance |

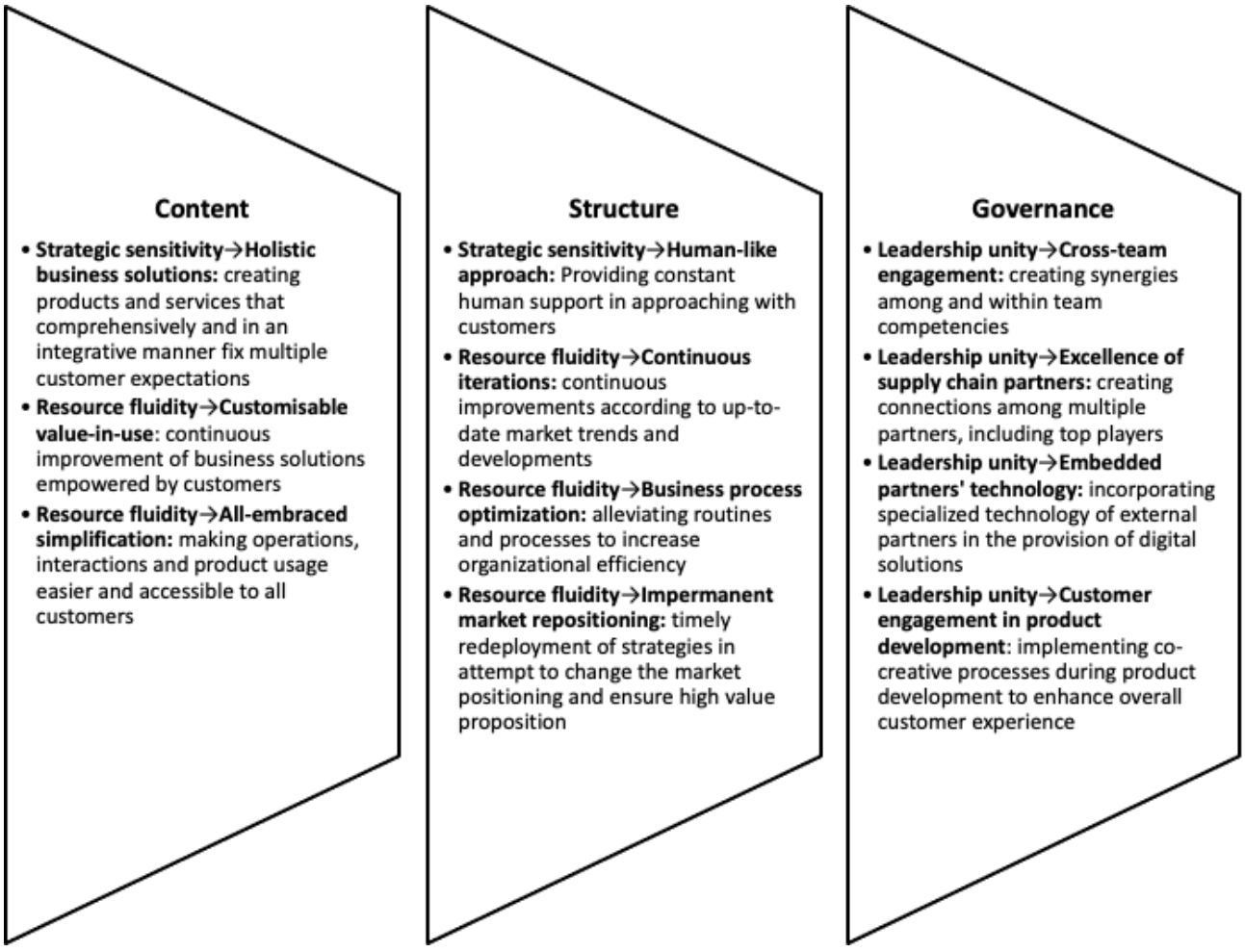
To ensure robust results, we applied the following criteria used in qualitative research: credibility, transferability, dependability, and confirmability (Bell et al., 2018; Lincoln & Guba, 2013). In particular, for the credibility criteria (which parallels internal validity or confidence in the trustworthiness of research findings), we performed respondent validation, i.e., we shared our findings with the participants and obtained the corroboration of the study results. The transferability criteria (i.e., the applicability of the results in other contexts) was assured by a detailed description of the context to guarantee the full apprehension and understanding of the research setting and drive an analytical generalization (Yin, 2013). Concerning dependability (i.e., consistency of research findings), two co-authors performed data analyses and data coding simultaneously and independently by triangulating the data from multiple sources. Finally, for confirmability (i.e., unbiased interpretation of the findings), in explaining our research findings, we incorporated direct quotes from our interviews. We supported our explanations with examples using the original data.

## Findings

Clickio's digital BM, from our point of view, consists of three intertwining elements, i.e., content, structure, and governance (Amit & Zott, 2012), that, taken together, contribute to defining how it creates and delivers value. By elaborating upon these dimensions, strategic agility is found to encourage the company's digital BMI in several ways. The details of our research findings are

discussed in the following paragraphs. Study findings are organized in a theoretical framework in which the key mechanisms of strategic agility impacting digital BMI across such dimensions are represented (see Figure 1).

**Figure 1.** A framework for Strategic Agility and Digital Business Model Innovation: content, structure, and governance




***Digital BMI of content***

The main purpose of Clickio is to support digital publishers to navigate through a vibrant digital ecosystem and overcome several challenges providing a holistic business solution that ranges from effective monetization strategy and data compliance to site performance and data analytics. This scope is enhanced by the firm's ability to understand environmental changes and sense future opportunities and threats (strategic sensitivity). Through a proactive attitude in addressing such problems faced by publishers, Clickio engages in analyzing overall customer needs comprehensively and develops products that cover them fully: *"Products and services that help sites grow. From ads*

*to site speed to GDPR consent — we got you covered"* (Clickio website). Different from other competitors in the sector that fulfill only specific, individual customer needs, Clickio is able to sense and seize promptly what the market wants, to offer a product that, comprehensively and in an integrative manner, fixes customers' problems. Clickio positions itself as a *solution provider* that closes the gap between the technology and commercial dimensions of every digital creator business. Thus, it focuses on offering solutions—not merely products—to real problems by developing products and services adjusted to shifts in customer needs and preferences. As the Director of Commercial Operations claims, "*All our products are very user friendly, quite easy to use, and the problems they solve are multiple*". Empowered by proactive actions, Clickio underwent a radical shift from a traditional business model to a holistic business solutions provider that addresses customers' objectives at 360°, and creates unique products of superior value, consolidating then its position as a market leader: *"*(…) *a solution to solve all these problems, because, for each aspect that I mentioned, there are separated provider, whereas* [Clickio product name] *is a unique solution* (…)*"* (Publisher Development Director).

The ability of Clickio to quickly reallocate the necessary business assets (resource fluidity) is concretized in the type of business solution offered. Clickio has developed an all-embracing platform that "disrupts" the traditional conception of the value-in-use (i.e., customer's outcome that is achieved through that product) (Macdonald et al., 2011), thus implementing customizable value-in-use. Indeed, Clickio empowers clients to use their products independently without having constant contact with a company. The Director of Commercial Operations explains that "*there is a basic version of every product, but it can be easily customized if it is requested. We are flexible enough in this sense to provide customization. For example, our product Prism is all custom, so we are very flexible in this regard*," adding that, *"thanks to our technology, we have created a system that allows many publishers to be independent when using our service, without the necessity to constant and direct support from people"*. With custom platform usage, Clickio exploits the early development of the market and the latent needs of customers as the client acts as the designer of the end product and results, thus delivering high-quality services.

Moreover, quick reallocation of resources (resource fluidity) impacts the way Clickio supports the provision of services and products. As assisting publishers operating in a highly dynamic and complex marketplace, Clickio is driven by the idea that it is important to simplify operations, compressing time and resources needed to perform activities and stimulate innovation. The researcher who participated in the firm's daily routine noticed how this aspect of all-embracing simplification occurs in multiple ways. For instance, when Clickio communicates with its clients, all the materials (e.g., instructions, newsletters) are created to be understandable to the broad audience, regardless of

the degree of tech literacy or knowledge. Also, Clickio offers a solution that combines data in one place to provide a unique, simplified report, thus solving issues in the management of multiple data sources. Even the platform's interface is developed to avoid unnecessary operations or steps. Furthermore, the most technologically sophisticated product of Clickio—the Consent Management Platform—is developed to *"allow publishers to set up a consent workflow in minutes and be easy-to-use and very flexible"*, as reported on the corporate site. Thanks to these tactics, the firm delivers new solutions quickly, significantly reducing the time and resources necessary to adapt to changes in customer needs and preferences.

***Digital BMI of structure***

Clickio successfully innovates its digital BM as it constantly looks for novel ways through which its core business activities are performed or connected, which is of extreme importance to compete in its dynamic and complex marketplace: "*Our market is different from this morning. Tomorrow is different from today, sometimes completely* (…) *Clickio operates in a very dynamic market*" (Publisher Development Director). Our findings reveal a range of innovative paths describing how Clickio creates and then distributes value to achieve its outstanding competitive advantage.

To gain a broader perspective about the future market development and successfully innovate its BM (strategic sensitivity), Clickio pays particular attention to the way of relating with clients. The fact that every task is performed within a virtual environment may risk amplifying the distance with customers, as people get frustrated by the huge number of options at disposal and the continuous interactions with automated voices or systems. This aspect reduces empathy and augments the sense of detachment from the company with the risk of undermining the company's value creation and customer expectations towards hyper-customized products or services. To fill this problem, Clickio engages in empathizing with customer feelings, adding the "personal" factor, i.e., emotional or psychological closeness, in the provision of its products or services, as the following quote exemplifies: *"Clickio has always had a direct relationship with the customer, therefore not showing itself as just a technological company or in any case just a screen to relate to or a robot. We have always tried to put the human factor forward"* (Commercial Director). By deploying such a human-like approach to be closer to customers, the firm enhances its ability to adjust its strategies and operations in response to market demand and gain strong reliability and trustworthiness. As the Publisher Development Director explains, it is true that there are several players in the marketplace which offer products or services of high quality. However, they often neglect to understand how important it is to create a human-like relationship with customers, especially when operating in a

virtual environment. Clickio tries to fix this problem by providing personal account managers tailored to address customers' objectives with a human approach.

In the product development process, Clickio does not follow rigid and planned processes. Rather, it is committed to performing continuous iterations to align with the shifting market trends and development (resource fluidity). For instance, if during product development the company notices that the product is obsolete since customers do not require that product anymore, Clickio gives up that idea immediately to concentrate on something that addresses what the demand looks for better. The introduction of GDPR (General Data Protection Regulation) represents an exemplar case of this BM's innovation process. The development of GDPR-compliant solutions did not belong to the competencies and technologies of Clickio. They were introduced later in response to a change in the needs of its customers. As a result, Clickio enriched its core competencies but also enlarged its market positioning considerably: *"When we launched Clickio GDPR Consent Tool—now used by big publishers—at that moment, there was a big need, but no products available. A lot of people trusted us and received great support. Then, there was a chain reaction, which still continues today.*" (Commercial Director).

Another crucial aspect exemplifying how resource fluidity impacts Clickio's activity system is business process optimization. Clickio is open to constant and prompt optimization of its operations thanks to timely sharing of information and tightly connected teams and departments. Unlike traditional organizational structures based on rigid performance schemes, Clickio's employees adopt more informal routines and processes to address issues, as the following quote explains: *"Optimization is not only the service we offer but the way we run our business. If any step of the task or project can be simplified or optimized, we don't discuss a lot but implement changes easily"* (Director of Commercial Operations).

Clickio's innovation in its BM's activity structure is also evident in the efforts made to cope with the recent pandemic Coronavirus, thanks to having different business model infrastructures in parallel (resource fluidity). Many companies were forced to reduce their advertising budget as market demand slowed down dramatically. In such a context, Clickio reacted promptly by searching for novel solutions to maintain customer value. As declared by the Publisher Development Director: "*In the time of pandemia, to ensure the same level of value proposition, we thought that we have to give additional solutions, and therefore more partnerships have been made with the vertical players of the market that do not belong to our classic offer. Thus, we posited ourselves as intermediaries that bring publishers additional solutions*." In this conception, Clickio was able to accomplish market permanent repositioning, which allowed timely redeployment of strategies in an attempt to

accommodate changing needs of clients. Clickio's BM was able to permanently run two separate modes of operating that ensured higher resilience during the pandemic.

***Digital BMI of governance***

Empirical evidence uncovers multiple ways through which leadership unity, reached through a dynamic and collaborative working environment, impacts the main actors performing BMI. The company strongly relies on within team competencies that, when merged together with fixing customer problems, enable to discover more effective solutions to changes in customer requirements or unexpected situations. Different departments meet constantly (e.g., on a weekly basis) to brainstorm new ideas or to discuss how to improve products. The cross-team engagement enables to development of a clear and shared vision of the marketplace and supports greater customer satisfaction. As underlined by the Publisher Development Director, "*If a publisher tells you: "I have this need", but in my portfolio of products I have nothing to offer him, I always bring the information internally to ensure that my company can evaluate if it is convenient to develop such a product or service*".

This collaborative attitude of Clickio can be found even in partnerships with excellent supply chain partners. To create greater customer value, the firm brings together premium ad partners and advertising networks, thus providing publishers with access to innovative solutions and products and enriching the experience of all market players. Notably, the value proposition of Clickio relies on the partnership with the main actor of the digital ecosystem, Google Inc. The collaboration with this prestigious partner enables the company to have early access to relevant information, such as new initiatives or regulations issued by Google, and, thus, be more competitive in the marketplace. Moreover, being a Google Certified Publishing Partner enhances Clickio's visibility as a reliable and trustworthy partner for publishers.

Not only does Clickio collaborate with other players, but, in some cases, the firm embeds the technology of other tech partners into its products. A peculiar example of how Clickio co-creates the value with external partners is described by the Commercial Director: "*From the very beginning, we have relied on the technology of external partners that we have integrated into our platform. For example, the payment system takes place in total independence. So that our clients know that on a certain day of the month, without having to make any requests, they will receive the payment. While other competitors with a traditional system should exchange emails, send off the invoices….for us, the management of payments is fundamental, because innovative businesses cannot fail to have an automated payment system*." By incorporating partners' technology in its business solutions, Clickio is able to create a win-win situation, as it delivers more valuable products while simultaneously saving

costs, as the Director of Commercial Operations specifies: *"If a website is located in the US and the server is located in Brazil or Russia, the response is slower, while if we have a server infrastructure in the US we can respond faster".*

Even Clickio's customers are involved in the product development process. The firm gets inputs and feedback from its clients, co-creates products with them to ensure the building of products and services tailored to solve their needs and requirements, and, also, it also gets inspiration from customers to further innovate its BM. By involving customer feedback, the firm has the opportunity to better engage in improving the overall customer experience, thinking about how to better serve its target market at large.

**Discussion**

BMI represents an increasing body of literature (e.g., Bhatti et al., 2021; Foss & Saebi, 2017, 2018; Iheanachor et al., 2021). However, more empirical studies about how strategic agility impacts digital BMI are still necessary (e.g., Warner and Wäger, 2019). In this chapter, we adopted an exploratory single case study research design to investigate how strategic agility enables organizations to innovate their digital BMs looking at the case of Clickio. Our study contributes to extending prior research in significant ways.

With our study, we contribute to deepening the different ways through which strategic agility, largely considered an important driver of BMI (Battistella et al., 2012; Bhatti et al., 2021; Brand et al., 2019; Doz and Kosonen, 2010), fosters firms to innovate the core dimensions of a digital BM. Prior literature emphasizes factors like novelty, lock-in mechanisms, complementarities, and efficiency as crucial for implementing BMI (Amit & Zott, 2012). We extend prior research by showing how the different meta-capabilities (i.e., strategic sensitivity, leadership unity, and resource fluidity) of strategic agility (Doz & Kosonen, 2010) impacts digital BMI with respect to the core dimensions of BM's content, structure, and governance (Amit & Zott, 2012).

In particular, prior literature highlights that strategic sensitivity means being able to perceive strategic developments (Doz & Kosonen, 2010). Our findings show that strategic sensitivity, enacted in a digital context, affects the type of activity performed (content) as it enables the creation of business solutions, i.e., products and services, that comprehensively satisfy multiple customer expectations. By distancing themselves from their traditional business model, firms can take a holistic view of future product development, which can significantly influence the development of innovative digital BM.

Moreover, in our study, strategic sensitivity directly affects the way activities are performed (structure) by rethinking the approach taken when communicating with clients. By implementing a

human-like approach, firms are able to create more close relationships with clients, which allows them to excel in the competition and gain a competitive advantage. This is in accordance with previous literature that assumes that BMs represent management's conjecture about what customers want, how that value should be delivered, and how value should be captured (Teece, 2010).

Furthermore, resource fluidity, which implies adjusting resources and operations in a flexible manner in response to changes in BM (Doz & Kosonen, 2010), impacts digital BM's structure in important ways, namely: continuous iterations, business processes optimization, and impermanent market repositioning. All these aspects enable companies to implement an activity system that comprehensively enhances the firm's ability to execute digital innovation in BM in accordance with the latest market trends.

Moreover, resource fluidity impacts the type of activities performed through customizable value-in-use and all-embraced simplification that bring products of greater value thanks to the continuous improvements empowered by customers. In doing so, strategic agility is found to enhance the company's ability to bring outstanding customer satisfaction and foster business scalability. This result extends the comprehension of the various organizational capabilities that aid firms in the transformation of their BMs (Foss and Saebi, 2017).

Finally, as regards leadership unity, which represents the commitment toward BMI (Doz & Kosonen, 2010), this work proposes that cross-team engagement, together with excellent partnership embedded in the firm's digital solutions, and deep customer engagement during the product development, complete a governance system that allows firms to develop adequate competencies and skills facilitating synergies over changing market dynamics, thus addressing innovation of a firm's BM successfully.

### *Managerial implications*

From a managerial perspective, our research findings illustrate the importance of developing digital BMs based on strategic agility. Managers and practitioners need to innovate their digital BMs continuously to provide timely and more effective responses to market demand. On the one hand, they should encourage technology adoption throughout the organizations. On the other hand, they need to embed agility into their strategic and operational efforts to adapt to the uncertainty of today's complex and fast-changing landscape more effectively. With this study, we provide guidance for assessing which kind of actions are appropriate to build an agile digital BMI, with a focus on content, structure, and governance dimensions.

### *Limitation and future research*

This study is subject to some limitations that could be addressed by future research. Indeed, further attention is needed to increase the understanding of strategic agility and digital BMI.

This study focuses on a single firm and industry; thus, our findings have few generalizations to other contexts. Therefore, researchers could extend our analysis to other sectors and explore whether further paths can be identified.

Furthermore, we based our analysis on the impact of strategic agility on digital BMI by considering the key dimensions of content, structure, and governance (Amit & Zott, 2012). Although this framework is largely adopted by recent studies exploring BMI in a wide range of contexts (e.g., Pereira et al., 2022; Zhao et al., 2020), future studies could extend the impact of strategic agility on BMI by adopting other frameworks, and identifying new categories that could add more value to our results.

Moreover, it would be interesting to understand under which conditions it would be easier to innovate an existing BM for agile firms. Hence, future studies could investigate the role of environmental turbulence in the relationship between strategic agility and digital BMI adoption.

Finally, it would be interesting to understand what potential barriers or challenges to agility implementation in digital BMI can be recognized (e.g., high costs for digital transitions).

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