

# Innovating For Green Future: Digital Business Models Through the Lens of

# **Dynamic Capabilities**

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# Abstract

Today's businesses constantly struggle to balance their ethical and ecological responsibilities and financial goals. Businesses must also adjust how they provide goods and services to younger generations via new digital platforms since the digital revolution has drastically changed the way people shop. For them to overcome these obstacles, businesses must make use of their in-house assets and adapt their operations in a way that anticipates and reacts to changes in the outside world. Based on the ideas of flexible abilities, this research presents a structure for business model innovation (BMI) that aims to achieve sustainability while adjusting to the digital era. The study uses a mixed-method approach, with interpretative structural modelling (quantitative) coming after meta-synthesis (qualitative). Approach, aspect, dimension, and component are the four interrelated layers that make up the final model. According to the report, sixteen variables are categorised into four main levels: "resilient information technology," "feasible performance," "environmentally friendly commitment," and "resilient consequences." By presenting environmental and digitisation as important forces behind shifts, this research offers a novel paradigm for modern BMI. The significance of "sustainable

engagement," which focusses on resolving ecological and social issues alongside consumer wants, is also emphasised by this system, in addition to developing firms to fulfil sustainability and digital transformation expectations. Studies on BMI is enhanced by this innovative approach.

Keywords: Digital transformation, sustainability, innovative business models, and dynamic capacities

# 1. Introduction

Organisations nowadays are being compelled to reconsider their economic strategy innovation (BMI) more and more. Three major difficulties are forcing modern firms to reconsider how they approach business model innovation (BMI): the necessity of incorporating the environment into company activities (Romero et al., 2021; Jørgensen and Pedersen, 2018); the potential and difficulties brought about by innovations in technology and technological change; and changes in the tastes and habits of customers as a result of these trends (Jørgensen and Pedersen, 2018). In addition to satisfying the financial needs of their consumers, corporations are also required to address issues related to society and the environment (Geissdoerfer et al., 2018; Aluchna and Rok, 2018). Accordingly, in terms of initiatives to accomplish environmental and social goals, sustainable business models (BMs) have been more well-known in the twenty-first century (Szromek, 2021). Businesses are now required by a number of world stock markets to provide performance on sustainability assessments. Studies highlight how durability can improve performance, reduce expenses for capital, increase the value of shares, and improve results from operations. Analysts that examined 190 empirical investigations on sustainably discovered that sustainable business models (BMs) help companies meet consumer needs while encouraging innovations to generate value for the economy, society, and environment (Bocken et al., 2014). As a consequence, companies trying to survive in the fast-paced world of today must integrate sustainably into their operations. Thus, in the twenty-first century, firms have made resolving economic, social, and environmental challenges a top strategic objective (Geissdoerfer et al., 2018; Aluchna and Rok, 2018; Nosratabadi et al., 2019). By incorporating ecological and social problems into their goods and services, leading businesses have transformed sustainability challenges into competitive advantages (Eikelenboom and de Jong, 2019). These trailblazers prioritise providing long-term advantages for users over profits in the short term, which calls for radical adjustments to corporate procedures in order to match financial success with sustainability objectives (Geissdoerfer et al., 2018; Bocken et al., 2019). Due to the pressing need for tackling the ecological and social implications of production-consumption systems, studies have been increasing highlighting the significance of environmentally friendly BMs (Bergmann and Utikal, 2021). In light of these developments, management are increasingly posing important queries regarding how to create lucrative, profitable companies and attain sustainable (Jørgensen and Pedersen, 2018; Brenner, 2018; Clinton and Whisnant, 2019). In order to achieve financial prosperity and an edge over competitors, a large

number of companies globally have adopted environmentalism as a strategy. Executives from businesses understand that sustainable can increase a company's competitiveness in the worldwide marketplace, even though various groups have varied ideas about what it implies (Hajiheydari et al., 2019).

Apart from ecological responsibility, another significant challenge is the disruptive impact caused by modern technology. Rapid developments in information technology since the early 2000s have forced companies to regularly evaluate and modify their operational models (Aagaard et al., 2019). Numerous developments have resulted from this technological shift, which has radically changed how companies function and spurred novel innovations in BMs (Gupta, 2018; Johnson, 2018). Using modern digital tools to enhance customer service, optimise processes, or create new business models is known as "digital transformation" (Kotarba, 2018). It entails modifying businesses to accommodate evolving consumer tastes brought on by advancements in technology (Kotarba, 2018). Mac is a prime example of how businesses may effectively use such innovations to add value and maintain their competitiveness (Warner and Wäger, 2019). In order to make notable improvements in both the rate and breadth of innovation, the implementation of newly developed technologies requires a radical change in business models (BM) (Brenner, 2018). The word "transformation" is purposefully used in place of "change" to emphasise the wide-ranging effects on organisations. Beyond functional changes, digital transformation necessitates a comprehensive strategy to take advantage of benefits and lessen risks associated with technological breakthroughs (Warner &Wäger, 2019). It is not enough to merely integrate electronic tools into pre-existing corporate systems. Rather, technology ought to be viewed as a driving force behind a thorough business transformation, opening up new strategic opportunities for value generation (Johnson, 2018; Gupta, 2018). Furthermore, consumer lifestyles have changed dramatically as a result of the rise of digital transformation. To meet the changing demands of the next generation of consumers, businesses need to rethink how they provide value. To stay relevant, use Business Model Innovation (BMI) (Jørgensen & Pedersen, 2018). For established organisations to survive and succeed in the digital age, they must adapt and create innovative business models that are in line with disruptive technologies (Tesch, 2019). According to studies, using digital technology effectively is essential to reaching sustainable development objectives (Aluchna&Rok, 2018). To increase BMI, companies must thus match their digitalisation plans with sustainable goals (Eikelenboom& de Jong, 2019; Parida et al., 2019). But striking this balance necessitates knowing what it takes to combine economic, social, and environmental factors while staying adaptable to the quick changes in technology (Brenner, 2018; Leleux& Van der Kaaij, 2018). Dynamic capabilities are crucial for durability since sustainability-focused BMs may need to continuously adjust to external settings. In contrast to static capabilities, dynamic capabilities allow companies to respond to external changes by converting resources, expertise, and competencies into novel offers (Clauss et al., 2019). In addition to promoting BMI, these capabilities improve the capacity to take advantage of

opportunities for digital transformation (Obaya et al., 2020). In order to develop and maintain competitive advantages in a market that is changing quickly, companies must recognise and capitalise on dynamic capabilities (Teece, 2018; Khodaei&Ortt, 2019). By taking into account both internal enablers like dynamic capacities and external drivers like digital technologies, this study aims to create an integrative framework for sustainable BMI. The influence on digital changes on BMs (Verhoef et al., 2021; Parida et al., 2019) and sustainable BMs (Shakeel et al., 2020; Cantele et al., 2020) are both covered by existing models; however, there is a lack of frameworks that combine environmental responsibility and digital evolution via flexible capabilities. The research lays forth three goals: to determine the essential elements of "business model innovation," "environmental sustainability," "fluid features," and "the digital age to evaluate and prioritise the connections among these elements within the framework of the previously described elements to put forward an all-encompassing BMI framework that takes into account adaptive capacities, environmental responsibility, and elements of digital change.

# 2. Theoretical background

The conceptual basis of the main components of the present research are examined in this section of the paper, which is followed by a concentrated treatment of the philosophical setting of each component. The primary conceptual structure for the study is the resource-based theory, which provides an elementary understanding of how companies use internal resources to accomplish their goals. The dynamic capacities hypothesis, which offers insights into how flexible and adaptable firms are in response to changing circumstances, complements this. To address the study's more expansive technological and interrelated aspects, networks and digital shift ideas are also used. As an important vehicle of creativity and the commercialisation of technological innovations, a company models (BM) describes the reasoning behind how organisations generate, arrive, and collect benefit (Teece, 2018). According to recent studies, innovative business models (BMI) is significantly influenced by environmental responsibility, digital change, and agile capacities. Nevertheless, little is known about the way these factors interact as well as how they together affect BMI.

Corporations are under two main constraints to develop in a sustainable manner: Consumer-driven social and environmental constraints, as well as advancements in digitalisation, which turn these hurdles into possibilities. The resource-centered theory states that in order for organisations to be flexible to these two issues, they must make use of their own assets in order to build flexible strengths. Adaptive **Qualities' Significance in SBMI** Companies may create creative solutions to societal and technical developments by adjusting their company models (BMs) to changing outer contexts thanks to dynamic capabilities. In contrast to static materials, flexible capabilities make it possible for Rearranging the resources, creation of new skills, addressing the quick changes in the environment and technology. According to study, adaptive competencies

are essential for coordinating a company's modernisation initiatives with its goals for the environment. While promoting long-term viability, they offer the adaptability required to strike a balance between invention and resiliency (Parida et al., 2019; Teece, 2018).

### **Study's Theoretical Framework**

The resource-based outlook (RBV serves as the theoretical cornerstone of the study, with dynamic capabilities theory serving as a supporting framework, as shown in Figure 1.

Title	Business model	Sustainability	Digital	Dynamics
			transformation	capabilities
Theory	Dynamic capabilities	Philosophy of	Resource-driven	View depending
	theory Resource-based	decision-making The	perspective	on resources
	view Business strategy	idea of networks of	dynamism	Scientific
	theory Strategic	people Picture	characteristics for	perspective Theory
	network theory	depending on	the digital shift	of networks
		resources The		
		concept of social		
		networks		
Reference	Parida et al. (2019),	Jabłon´ski (2019);	Nwaiwu (2018),	Vicente <i>et al.</i>
	Sniukas (2020);	Lu <sup></sup> deke-Freund (2020); Hu <i>et al.</i> (2019)	Caputo <i>et al.</i> (2021); Nadkarni andPru <sup></sup> gl (2021)	(2018), Andresen
	C`irjevskis (2019); Lu <sup></sup> deke-Freund			(2020)
	(2020); Hu et al.			
	(2019),			
	VoDoVoZ and MaY			
	(2017); Ghezzi and			
	Cavallo (2020)			

The conceptual structures that govern sustainable business model creativity (SBMI) are still in their infancy considering the wealth of research on BM and BMI (Geldres-Weiss et al., 2021). The COVID-19 epidemic and growing environmental problems like climate change have made it further more clear that companies must quickly alter their business models to maximise value for all parties involved. Companies are being forced to look for new ways to create value as a result of these global problems, which have sparked a trend to sustainability-driven BMI (Muhic&Bengtsson, 2019). This study aims to close this gap by recognising and

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connecting the crucial elements of digital transformation, sustainability, and dynamic capabilities with BMI offering a comprehensive framework for SBMI that considers both internal and external dynamics.

### 2.1 Business Model Innovation

Although BM has been extensively studied, it is still unknown what causes BM to result in BMI, under Foss and Saebi (2017) (Geldres-Weiss et al., 2021). According to Teece (2018), BM is a tool for innovation that may be used to boost economic growth while gaining an advantage over competitors. Kuratko et al. (2011) further contend that BM must be dynamic in which business processes must be adjusted for continuous enhancement to preserve a competitive edge in a volatile economic climate. As a result, businesses are continuously changing, restructuring, and reinventing their operations to survive in the fast-paced global marketplaces of nowadays (Geldres-Weiss et al., 2021). BMI is predicated on the necessity of altering the organization's structure to create, distribute, and extract value (Geissdoerfer et al., 2018). Being overweight or obese allows a beyond only altering goods and procedures, it involves a more detailed shift in the consumer value proposition (Geldres-Weiss et al., 2021).

#### 2.2 A viable business plan

Views on how to conceptualise a "sustainable business model" are highly varied (Geissdoerfer et al., 2018; Muhic and Bengtsson, 2019). According to Goni et al. (2017), this diversification stems from knowing because concerns pertaining to maintenance have been occurring increasingly frequently and widely over the past few decades. According to Chofreh et al. (2018), politicians, scholars, and experts are completely bewildered and astonished by the widespread issues of pollutants in the air, watershed loss, low human development, slow economic growth, and climate change. According to scientists, administrations must address these issues by enforcing stringent laws on companies to compel them to transition to sustainability (Geldres-Weiss et al., 2021). But according to Schaltegger et al. (2012), developing an affordable BM entails volunteer to make money while assisting in the resolution of social or ecological problems (Velter et al., 2020). 2.3 Innovation in sustainable business models To satisfy consumers' worries about durability and provide an ongoing and profitable competitive edge, the SBMI aims to either create a new BM or alter the elements of a present BM (Geldres-Weiss et al., 2021). SBMI has been presented in scholarship as a powerful way to solve social or environmental issues and obtain an edge over competitors. By incorporating ecological and social problems into the core company activities, it therefore creates an example for a shift in corporate practices. SBMI examines if a company's beneficial impacts on humanity and the planet may be enhanced or its negative consequences can be mitigated. For these initiatives to be successful,

# 2.3 Innovations for environmentally friendly business models in the digital era

BM idea was initially introduced in business and leadership writings to comprehend the impact and transformations brought about by technological developments, such as the development of the internet, on company practices after the year 2000 (Kotarba, 2018). It is additionally indisputable that electronic devices have an influence on how people live. By granting equitable & accessible access to scarce resources, ubiquitous technology advancements not only preserve the environment and reduce emissions but also advance social justice and equality (Brenner, 2018). The diversity of BMs that and the necessity to create durable BMs have grown far greater since the beginning of this age of digital technology. The diversity of business models and the necessity to create sustained BMs have grown significantly with the beginning of the internet. In reply to the growth and pervasive influence of digital technology on enterprises, the phrase " digital transformation" has been coined in the last few years. According to Fellenstein and Umaganthan (2019), the digital shift is a new paradigm for conducting business that is in line with changes or innovations in corporate structures and procedures as well as updated approach for client service and social behaviours. Therefore, in this investigation, we consider the idea of digital shift, which is focused on how digital technology might alter a business's business model, leading to revolutionary changes in the business's goods, structure, and procedures (Warner and Wa<sup>°</sup>ger, 2019).

# 2.4 Dynamic capabilities and sustainable business model innovation in the digital era

Any business that wants to acquire and preserve a competitive edge while tackling an interpersonal or green problem must rely on its improved internal strengths in a world with is changing quickly due to fast technological advancements. Flexible abilities, which occur through the mix of supervisors, learning, and reconfiguration processes, therefore constitute a crucial linked concept for a competitive firm. To do this, the business must closely observe and assess its surroundings for the purpose to spot shifts and emerging patterns. It must then adjust its operations to acquire an upper hand in the new setting (Vicente et al., 2018). Developing dynamic skills, according to Teece (2018), enables the business to recognise opportunities, gather resources for growth, update some aspects of its business must concentrate on using dynamic capabilities to provide innovation and digital transformation to their business managers (Fellenstein and Umaganthan, 2019). The implications of the other ideas and their interactions have not been taken into account in the current research, which has focused on one of the three concepts of sustainability, digital transformation, or dynamic capacities at a time. Our work aims to close this gap by conceptualising the three ideas of sustainability, digital transformation, and dynamic capacities as well as how they interact with BMI.

# 3. Research Methodology:

This research investigation takes an experimental mixed-methods technique to create an outline for sustainable business model innovation (SBMI) in the age of digital technology, with an emphasis on flexible capacities. There are two phases to the research.

### **Qualitative Phase**

The initial stage involved using a meta-analysis approach to carefully analyze pertinent academic research to identify key concepts and aspects of SBMI. The analysis found 254 relevant publications in databases such as Science Direct, the Web of Science, and ProQuest using carefully chosen words like "business model innovation" and "sustainability." After deleting duplicates, applying the parameters for inclusion and exclusion, and carefully assessing grades with the Critical Appraisal Skills Program (CASP), 29 papers were chosen for final evaluation. The pieces in question underwent extensive theme and text assessment, yielding 84 first codes, and were unified into three gets closer four areas, sixteen dimensions, and 37 components. To guarantee dependability, professionals analyzed and verified the derived dimensions, with a kappa index of 0.707 showing strong agreement along with an accuracy score of more than 0.7. This qualitative step laid the groundwork to establish a complete SBMI paradigm.

#### Quantitative phase

The following step used Interpretive Structural Modelling (ISM) to create an organized order and discover the links between the elements and parts established during the qualitative portion of the study. ISM is a systematic process for creating a logical and visual representation of complicated interrelationships between factors, which is then confirmed by experts' opinions. This technique clarified the relevance and interdependence of SBMI components, allowing hazy notions to be transformed into a well-structured model. By combining data from both stages, the study provides a complete, proven paradigm for addressing the nexus of sustainability, digital transformation, and dynamic capacities, filling gaps in the existing literature and providing practical insights for SBMI in the digital era.

#### 4. Research Results

Qualitative Study Outcomes results of the Meta-Synthesis shown in Table 4 offer a thorough synopsis of the topic assessment and a meta-analysis carried out throughout the first stage of this investigation and the second stage has quantitative study outcome ISM stands for Intuitive Structural Modelling. After the qualitative phase identified 16 important aspects, the second step used ISM to map the links between these dimensions. This was achieved by using snowball sampling to choose 18 PhD-holding specialists with significant topic knowledge and competence to complete the ISM matrix questionnaires. The procedure started with Step 1:

Recognition of Difficulty Variables for in which the facets of the analysis of material were used to determine the challenge elements. The Structural Self-Interaction Matrix (SSIM) was created using all of these parameters in their code (acronym) form (Table 5). The matrix below was created for capturing the correlations amongst the factors specified in its sections, leading to Step 2: Formation of the SSIM. The distribution matrix (Table 6) was based on situational linkages that reflected expert opinion by pairwise comparisons of all variables (X1–X16). A series of discussions among 18 chosen professionals served as the foundation for the creation of the SSIM as the After comparing the opinions of these scientists, this final figure uses the "mode"—the widely accepted connection for each pair of variables. Applying predetermined guidelines, SSIM elements were transformed into binary figures for Step 3: Creation of the Early access Matrix (Table 7). In order to ensure logical coherence in inter-variable interactions, transitiveness was added to this first matric in Step 4: Formation of the Final Reachability Matrix. The reachability set, predecessor established, & crossover set over every factor have been determined during Step 5: Degree Separation. The variable itself and other variables that depended on it made up the reachability set, but the variable itself and related characteristics it impacted made up the antecedent set. The interpretative architectural modelling approach was built upon those stages.

Table	Codes used for the approved variables			
Symbol	Dimensions	Symbol	Dimensions	
X8	Value proposition	X10	Capture value	
Х7	Value learning	Х9	Customer engagement	
X6	Value delivery	X11	Economic results	
X5	Value creation	X12	Environmental engagement	
X4	Social computing	X15	Environmental results	
Х3	Green computing	X16	Social engagement	
X2	Digital technologies	X13	Social results	
X1	Business computing	X14	Value agility	

With per parameter, the feasibility population plus the preceding set were examined as part of the grade segmentation procedure. The initial phase of the algorithm was given factors with the same overlapping and convenience categories. Subsequent levels were then determined by repeating this process for the relevant characteristics, omitting those in which they had previously been put. Nine various model categories were found using this incremental procedure, as shown in Diagram 4. An initial drawing was created using the various levels as the final matrix of reachability. in Step 6: Developing the Complete Interpretive Struct Model. The final interpretative structural model was created when transitivity was eliminated, as seen in Figure 4. Step 7: The "matriced'impactscroisés multiplication appliquée a classement (MICMAC)" approach was used to analyse pushing capacity and reliance (MICMAC Diagram). The high direction on the MICMAC figure represented the motive strength of the factors at play, while the horizontal plane represented their reliance. The parameters have been separated into four main groups, as shown in Figure 5: autonomy, dependence, connections, and independent. Though "commercial long-term sustainability," "engaged social environmental sustainability," and "sustainable development" were found to have the most reliance and the least drive authority, "online technology" stood out as the component with the greatest autonomy and pushing power.



"healthy Results," the last component, includes financial, social, and natural results. While financial implications are crucial, implications for society and the environment must also be considered. Over time, companies should evaluate, disclose, and enhance environmentally friendly metrics. In order to help existing

and new businesses attain viability in the age of digital technology, the final analysis models (Figure 6) functions as a company model (BM) canvas for redesign and invention. This approach incorporates environmental and disruptive technology, in contrast to standard BMs, which are mostly concerned with creating economic value. It highlights dynamic potential while addressing the difficulties in converting BMs to sustainability and digital revolutions. This approach differs from Osterwalder's BM paper in that it views innovation as a fundamental component, integrates sustainability in all areas of life, and introduces the idea of "Sustainable Engagement" to emphasize the value of integrating the environment and society from the very beginning of the business's design endeavor.

# 5. Discussions

Under the context of climate change and modern computation, the expanding issues of sustainable include economic, social, and environmental elements (Park, 2022). Prospective ecological computers is anticipated to be crucial in addressing increasing environment worries expanding on the idea of commercial computer first presented by Ellis (2019). With the goal to capitalise on digital technology and promote a more vibrant social and ecological life, this strategy combines many concepts, procedures, and regulations. This poses a crucial query: how can businesses gain and maintain a competitive edge in the face of the fast expansion and variety of game-changing digital technologies? Teece (2007, 2018–2023) asserts that the interaction of management, learning, and reconfiguration processes results in dynamic capacities. Companies must do a thorough assessment of their surroundings in order to spot changes, efficiently share knowledge, and adjust to these changes by themselves. These frameworks demonstrate their ability to generate and provide clients with content (Vicente et al., 2018). A pair of two main methods for creating a BM that are frequently seen. Although other approaches stress flexibility and compatibility with changing business contexts, the static approach concentrates on creating a coherent plan. Three fundamental powers-sensing, grasping, and reconfiguring—are at the centre of adaptive capacity concept. While grabbing skills concentrate on the ability to efficiently use resources to seize new possibilities, abilities to sense relate to the recognition and response to external shifts. Re-establishing capacities entails changing the business's management, procedures, society, tactics, and architecture. It is critical to consider how these internal dynamic capacities are affected by the outside elements of the digital shift. To create new capabilities for the digital era, companies have to integrate the digital change process and their current dynamic skills. In addition, the idea of flexible abilities for sustainability-also known as sustainability-based, green, or ecological qualities-has surfaced in the literature. These skills can enhance company success in terms of the economy, society, and environment. Sustainability-related economic, social, and environmental considerations also have a bearing on the company paradigm development (BMI) manage, that is influenced by these advances in technology. For instance, commercial computing, communal computing, ecological calculating, and technological value are all included

in environmentally friendly computing, which advises companies how to reduce adverse consequences while maximising favourable ones. The necessity for companies to constantly learn, develop, and modify their business models for sustainability is also emphasised by the sustainability execution component. Last but not least, the sustainable engagement component emphasises how crucial it is to establish solid client connections by providing digital and eco-friendly goods and services. This will increase client connection and participation and pave the way for success over the long run.

#### 6. Conclusion

Our goal in this experimental a mixed-method study was to uncover important components of BMI while taking sustainable and technological change into account. By using a meta-analysis in the initial phase of our research, we were able to extract 32 ideas over 16 parameters, encompassing the four primary methods shown in Figure 4. We used the ISM approach to ascertain the relationships among these key elements and the sixteen dimensions that serve as the focus points of our framework; the outcomes are shown in Table 4. At the most basic level, you are dealing with technological advances that power corporate, interpersonal, and ecological computing principles, as is rationally stated. We referred to them as "sustainable commuting" and went into further detail about them in Section 5.1 of the subject matter. This marks the beginning of a rethink of BM setup, motivated by revolutionary technology and mindful of environmental objectives. Values learning, which propels value creation, value agility, and value proposition, was a key component of BMI at the next level. In Article 5.2, which we refer to as "viable execution," the significance of "education" and "agility" for BMI in this context is further explored. The three main elements of value delivery-social engagement, consumer engagement, and environmental engagement—have been presented as we advance our ISM. In Section 5.3, we spoke about the importance of "sustainable engagement" in sustainable digital BMI and the key elements that companies should take into account. Lastly, we anticipate that each of these elements and their The capture of value leads to "viable results," which have an impact on the environment, the economy, and society. It is important to note, nonetheless, that the model this study suggests is a general integrative framework that links key elements that are crucial for sustained BMI and are fuelled by revolutionary digital innovations. Therefore, by responding to the questions we posed in each phase, we encourage professionals to think about their unique business and technology needs. In order to contextualise and define our model for implementing various novel technologies, including blockchain technology, IoT, AI, and big data, with the goal of sustainable creative business model creation, we also urge more contextualised research.

### References

Best, B., Miller, K., McAdam, R. and Moffett, S. (2021), "Mission or margin? Using dynamic capabilities to manage tensions in social purpose organisations' business model innovation", Journal of Business Research, Vol. 125, pp. 643-657.

Bocken, N., Boons, F. and Baldassarre, B. (2019), "Sustainable business model experimentation by understanding ecologies of business models", Journal of Cleaner Production, Vol. 208, pp. 1498-1512.

Bocken, N.M., Short, S.W., Rana, P. and Evans, S. (2014), "A literature and practice review to develop sustainable business model archetypes", Journal of Cleaner Production, Vol. 65, pp. 42-56.

Bocken, N.M. and Geradts, T.H. (2020), "Barriers and drivers to sustainable business model innovation: organization design and dynamic capabilities", Long Range Planning, Vol. 53 No. 4, p. 101950.

Brenner, B. (2018), "Transformative sustainable business models in the light of the digital imperative–a global business economics perspective", Sustainability, Vol. 10 No. 12, p. 4428.

Buzzao, G. and Rizzi, F. (2021), "On the conceptualization and measurement of dynamic capabilities for sustainability: building theory through a systematic literature review", Business Strategy and the Environment, Vol. 30 No. 1, pp. 135-175.

Cantele, S., Moggi, S. and Campedelli, B. (2020), "Spreading sustainability innovation through the coevolution of sustainable business models and partnerships", Sustainability, Vol. 12 No. 3, p. 1190.

Caputo, A., Pizzi, S., Pellegrini, M.M. and Dabic', M. (2021), "Digitalization and business models: where are we going? A science map of the field", Journal of Business Research, Vol. 123, pp. 489-501.

Chesbrough, H. (2010), "Business model innovation: opportunities and barriers", Long Range Planning, Vol. 43 Nos 2/3, pp. 354-363.

Chofreh, A.G., Goni, F.A. and Klemes<sup>\*</sup>, J.J. (2018), "Sustainable enterprise resource planning systems implementation: a framework development", Journal of Cleaner Production, Vol. 198, pp. 1345-1354.

C<sup>\*</sup>irjevskis, A. (2019), "The role of dynamic capabilities as drivers of business model innovation in mergers and acquisitions of technology-advanced firms", Journal of Open Innovation: Technology, Market, and Complexity, Vol. 5 No. 1, p. 12.

Clauss, T., Abebe, M., Tangpong, C. and Hock, M. (2019), "Strategic agility, business model innovation, and firm performance: an empirical investigation", IEEE Transactions on Engineering Management, Vol. 68 No. 3, pp. 767-784.

Clinton, L. and Whisnant, R. (2019), "Business model innovations for sustainability", Managing Sustainable Business, pp. 463-503, Springer, Dordrecht.

De Silva, M., Al-Tabbaa, O. and Khan, Z. (2019), "Business model innovation by international social purpose organizations: the role of dynamic capabilities", Journal of Business Research, Vol. 125, pp. 733-749.

Demil, B. and Lecocq, X. (2010), "Business model evolution: in search of dynamic consistency", Long Range Planning, Vol. 43 Nos 2/3, pp. 227-246.

Eikelenboom, M. and de Jong, G. (2019), "The impact of dynamic capabilities on the sustainability performance of SMEs", Journal of Cleaner Production, Vol. 235, pp. 1360-1370.

Ellis, P.G. (2001), "Business computing: the second 50 years".

Fellenstein, J. and Umaganthan, A. (2019), "Digital transformation: how enterprises build dynamic capabilities for business model innovation: a multiple-case study within the logistics and transportation industry".

Foss, N.J. and Saebi, T. (2017), "Fifteen years of research on business model innovation: how far have we come, and where should we go?", Journal of Management, Vol. 43 No. 1, pp. 200-227.

Franc, a, C.L., Broman, G., Robert, K.-H., Basile, G. and Trygg, L. (2017), "An approach to business model innovation and design for strategic sustainable development", Journal of Cleaner Production, Vol. 140, pp. 155-166.

Frank, A.G., Mendes, G.H., Ayala, N.F. and Ghezzi, A. (2019), "Servitization and Industry 4.0 convergence in the digital transformation of product firms: a business model innovation perspective", Technological Forecasting and Social Change, Vol. 141, pp. 341-351.

Geissdoerfer, M., Vladimirova, D. and Evans, S. (2018), "Sustainable business model innovation: a review", Journal of Cleaner Production, Vol. 198, pp. 401-416.

Geldres-Weiss, V.V., Gambetta, N., Massa, N.P. and Geldres-Weiss, S.L. (2021), "Materiality matrix use in aligning and determining a firm's sustainable business model archetype and triple bottom line impact on stakeholders", Sustainability, Vol. 13 No. 3, p. 1065.

alignment between sustainability and information systems: a case analysis in Malaysian public Higher Education Institutions", Journal of Cleaner Production, Vol. 168, pp. 263-270.

Gu<sup>°</sup> mu<sup>°</sup> s, S., Hallinger, P., Cansoy, R. and Belliba, s, M.S, . (2021), "Instructional leadership in a centralized and competitive educational system: a qualitative meta-synthesis of research from Turkey", Journal of Educational Administration, Vol. 59 No. 6, pp. 702-720.

Hajiheydari, N., Talafidaryani, M., Khabiri, S. and Salehi, M. (2019), "Business model analytics: technically review business model research domain", Foresight, Vol. 21 No. 6, pp. 654-679.

Hajiheydari, N., SoltaniDelgosha, M., Wang, Y. and Olya, H. (2021), "Exploring the paths to big data analytics implementation success in banking and financial service: an integrated approach", Industrial Management & Data Systems, Vol. 121 No. 12, pp. 2498-2529.

Hu, H., Huang, T., Cheng, Y. and Lu, H. (2019), "The evolution of sustainable business model innovation: evidence from a sharing economy platform in China", Sustainability, Vol. 11 No. 15, p. 4207.

Inigo, E.A., Albareda, L. and Ritala, P. (2017), "Business model innovation for sustainability: exploring evolutionary and radical approaches through dynamic capabilities", Industry and Innovation, Vol. 24 No. 5, pp. 515-542.

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