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**Digitalization of Sustainable Business Practices and
their Influence on Customer Experiences: A Systematic
Review**

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Abstract

Purpose: Digitalization research is increasingly receiving interest among academics and researchers in recent years. The current systematic review provides a detailed analysis of fragmented literature on digitalization of business sustainable practices with the primary objective of structuring the boundary conditions for the investigation of the phenomenon.

Methodology: The review applies a multi-dimensional framework for the synthesis and analysis of the research, and to discern the three primary thematic areas of digitalization including structural change and value creation, the use of digital technologies, and consumer behaviour. Based on the approach of the analysis of the articles, the adopted methodological framework was important in achieving the objectives of the review.

Finding: The study found that the internal and external perspectives of digitalization research are applicable in the Business-to-Business (B2B) and Business-to-Customer (B2C) by promoting the adoption of sustainable business practices and improving collaborative and positive relationships with the consumers to enhance customer experience. Digitization of business practices has the potential of enhancing connectivity, promoting financial inclusion and improving access to trade and public services. Also, it is

reported that digitalization can be used as a tool for improving the absorption of knowledge to enhance innovation and strategic renewal.

Recommendation: Companies should consider long-term prospects and digital disruption before embracing new technology. Businesses should redesign the customer journey to fit consumers' demands and focus on creating connections. To succeed, organizations must personalize the consumer experience. To collect client data and provide a unique experience, companies need a CRM. Consumers desire a seamless, anytime multi-channel experience. Companies may provide fast, tailored, and easy-to-access services by integrating all interactions into a single digital profile.

Keywords: *Digitalization, structural change, sustainability, consumer behaviour, dynamic capabilities.*

1.0 INTRODUCTION

The turn of the new millennium witnessed an unprecedented growth and rise in technological advancement and innovation that was characterised by increased interactivity, accessibility and reproducibility. With the advent and adoption of digital technology, there has been significant and fundamental changes in business operations especially in relation to management models and revenue production. According to the Organisation for Economic Co-operation and Development (2022), digital technologies are an important tool with the potential of enhancing inclusivity and promoting sustainable practices through innovation, generation of efficiencies and improvement of services. As a process, digitalization involves the integration of digital solutions and tools in business operations to enhance customer value and competitive edge. The process of digital transformation requires innovation and culture change which leads to continual challenge for status quo based on performance metrics. In human history, the adoption of digital technologies in business practices and personal life have advanced more rapidly than any innovation and covers close to 50 percent of the developing economies population (Kraus et al., 2022).

While the adoption of digital technologies picked pace in the early 2000s, the original era of the start of digital transformations dates back to the late 1970s when businesses started incorporating computer-aided application in their operations. In the early 1990s, the enterprise resource planning and customer relationship management programs were invented with the aim of improving efficiency and productivity through the digitization of manual processes (Roucoules & Anwer, 2021). Later, in the late 1990s, eCommerce and online banking were introduced with the increase in the internet speeds. The first decade of the new millennium witnessed the introduction of social media which has revolutionized communication and business operations. The initial aim of the businesses that were adopting digital tools and channels was for enhanced communication with customers by improving interactions. With growth of ambitions, the businesses have renewed their focus on digital transformation as a competitive tool in the global marketplace (Bi & Wang, 2020). Within the last decade, digital transformation has become increasingly popular due to the potential of improving agility, efficiency and sustainability of business operations.

With a focus and an increasing interest on the significance of digitalization on business operation, a lot of research is being conducted on the phenomena and its evolution. The focus of most research on the topic is to explore the role of digital technologies on the facilitation of innovation of business models, digital marketing and business-to-business relationships. Most of the extant reviews and research on the topic such as Budler, Župič and Trkman (2021) Sahut, Iandoli and Teulon (2021) and Müller, Buliga and Voigt (2021) have a narrow perspective and have ignored the evolution of the process especially in business management (Martínez-Caro et al., 2020). To this end, the focus of the current systematic review is to provide a detailed and comprehensive analysis of the existing research on the process of digitalization of business sustainable practices and their influence on customer experiences. Precisely, the review structures the existing literature on the topic of interest and provides a detailed overview of the research associated with digitization within the scope of business and management. The proposed research framework involves a solid discussion, critique and review of the research to provide a common basis of understanding. Therefore, the primary purpose of the current review is to contribute to and provide positive insights on research on the evolution of digitalization and its impact on business operations and practices with a focus on customer experiences.

2.0 LITERATURE REVIEW

With the increasing interest on the evolution and significance of digitalization in business and management, numerous research studies and reviews such as Caldera, Desha and Dawes (2019), Di Vaio et al. (2020) and Huq and Stevenson (2020) have been conducted to determine how the phenomena can be used to enhance productivity and improve the implementation of sustainable business practices. It is important to note that there is no specific and standardized measuring yardstick for the reliability and accuracy of the research studies and reviews on the topic of interest due to the dynamic and constantly changing digital landscape caused by global geopolitical events and economic factors. The current systematic review, therefore, analyses and reviews only the latest research studies that have been published within the last five years. The overall purpose of the current section of the review is to identify and structure the existing research, and provide a brief overview of the objectives and the results of literature therein. The section further maps the thematic evolution of the digitalization research by focusing on reviews and research studies with a synergistic framework that relates the topic of interest to areas of business operations and customer experience.

Kraus et al. (2022) conducted a detailed overview of the current status quo of digital transformation in business and management research in the United Kingdom. The two-fold objective of the research was to map the thematic evolution of the digitalization research, and propose a synergistic framework of association of the research to business and management (Kraus et al., 2022). According to Kraus et al. (2022), digital transformation research has become specialized and restricted to specific domains which has completed the larger field of the research making it difficult to apprehend. As a phenomenon, Kraus et al. (2022) posits the digitalization involves the introduction of processes and mechanisms that have an impact on the key structures of business operations and management. In another research study, Kraus et al. (2021) performs a qualitative classification of digital business transformation literature based on technological, business and societal impacts. The primary focus of the study was to provide insight on the current state of literature on digital transformation literature using a VOS viewer to provide a graphical visualization of the node network of the literature. The existing research gaps of the literature should provide objectives of future lines of research to provide useful insights of how business can adapt to the disruptive changes caused by the phenomenon.

Moghrabi et al. (2023) conducted a research study to determine the relationship between digital transformation and changes in business operations, specifically in the manufacturing industry in Japan. The authors analysed different businesses and explored the extent of the influence of digital transformation on business operations. The two-stage study reported that digital transformation has a strong influence on the effectiveness and survival of a business in relation to technology and business model standpoint (Moghrabi et al., 2023). In the first stage, the authors assessed the performance of exemplary businesses within a timeline of three years while in the second stage, they explored the reasons for the successes of the business in relation to digitalization (Moghrabi et al., 2023) Digitalization is an important tool that can be used to enhance the business operations, improve customer experiences, streamline the supply chain systems and promote environmental conservation. In another research study, Jarvenpaa and Standaert (2018) explored the role of digital probes in opening the possibilities of generativity in the United States. The authors reported that digitalization has an inherent generative property of changing the conventional conceptions and the adoption of non-digital innovations.

An ethnographical review by Baiyere, Salmela and Tapanainen (2020), explored the new logics of business management in the context of digitalization. Based on an ethnographic study of an element of digitalization, the authors uncover factors associated with the application of the logics of digital transformation and proposes new logics by unpacking the dynamics of changes associated with the phenomenon. Baiyere et al. (2020) analyses digitalization at the organizational level and, therefore, draws a distinction between structural and convergent changes during the transformation process. A structural digital transformative change defines the real-life manifestation of the organization and represents the tenets that forms the foundation of the organization's reality (Baiyere et al., 2020). Convergent digital transformative change does not alter the structure of the organization but rather a process aimed at engendering a qualitative different organization. As reported by Baiyere et al. (2020), digital transformation can alter the internal structure of the organization and also reflect the company value proposition, practices and identity.

A research study by Caliskan et al. (2021) explored the evolution and role of digital transformation of the conventional marketing models in the new technological era in Western Europe. The authors conducted a detailed analysis of literature associated with the changing and developing technologies within the production domain. In the study, the author focused on exploring the impacts of digital transformation on the marketing-mix strategies and reported that the most affected elements of the mix include the product, process and physical evidence. According to the author, the digital transformation has led to the development of new business models that has led to the rise of the Fourth Industrial Revolution, Industry 4.0. Koltunovych and LalipourDizaji (2022) also conducted a qualitative research study to determine the impact of digitalization on the sustainability of small and medium-sized enterprises (SMEs) located in Sweden, France, and Iran.. The study investigated the perceptions of SMEs about digitalization and the sustainability of an organization, and the relationship between digitalization processes and the sustainability. The authors reported that digitalization has the potential of enhancing organizational sustainability through value creation, enhanced efficiency and competitive edge.

Ekman et al. (2020) conducted a longitudinal multi-case study of the role of dual embeddedness in the digital transformation of global business processes. The study investigated five Forbes Global 2000 organizations with headquarters in Europe and large subsidiaries in the U.S. The study applied a theoretical perspective of embeddedness to define the complexities associated with digital transformation in multinational corporations. It is reported that the process of digitalization is quite an iterative journey that is significantly influenced by internal embeddedness, external embeddedness, fiscal strategies and technological considerations. The authors highlighted the significance of embeddedness in digitalization of business sustainable practices and improving customer experience. Hanelt et al. (2022) conducted a systematic review of digital transformation literature with a focus on the implications of for strategy and organizational change. The review employed a multi-dimensional framework to analyze digitalization literature and discern the thematically patterns of technological impact, compartmentalized adaptation, systemic rift and holistic co-evaluation. The authors report that the nature of digitalization is partially covered by organizational change conventional frameworks.

Several research studies and reviews have been conducted to explore the significance of digitalization in structural and value creation business practices. A research study by Di Gregorio et al. (2019) explored the changes in business marketing practices attributed to digital

transformation in the United Kingdom. The research classifies five types of capabilities that employers look for: general soft skills, analytical abilities, digital and technological know-how, fundamental marketing knowledge, and an understanding of the customer's perspective. The survey found that even while new talents and competencies are emerging, fundamental soft skills and core marketing skills remain critically important in Europe's new digital realm. Any recent marketing grad with global career aspirations would be remiss to ignore the importance of honing the foundational skills of the marketing profession: planning, organization, critical thinking, and strategic foresight. Kohtamaki et al. (2019) investigated the direct and interaction effects of digital transformation on customer purchase decisions and experiences.

This article shows the ecosystem's digital servitization from a company's perimeter in the UK. This may matter if digitalization becomes increasingly important to companies and markets. This paper offers three tips for factory managers integrating digitalization and servitization. Managers should first consider how servitization and digitalization complement one other. The paper includes five more digital servitization business concepts. Offer configuration, servitization, and digitalization distinguish these business strategies. The authors suggest managers to carefully assess which company model is most suited to their resources and market circumstances since every model may boost earnings and operations. The report advises organizations to explore several business strategies in today's highly competitive and uncertain market. Inflexibility may result from a successful but static corporate strategy. Businesses must explore servitization and digitalization business strategies to remain competitive. Another research study by Baber et al. (2019) investigated the evolution of digital business models and its relationship to effectuation and causation logics in Japan. The research shows that while the case companies underwent digital transformation, their digital business models adapted in accordance with effectuation logic and causal logic.

While making the transition to new platforms, among other things, all of the companies used causal reasoning. Successful product development and network tweaks at the case companies were the result of the employment of effective logic. Companies producing video games in particular depended on effectuation to create memorable experiences for their customers. Changes in revenue structures and the transmission of value were unaffected by effectual logic. Baptista et al. (2020) performed a systematic review on organizational changes caused associated with the implementation of digital business models in the United States. The authors reported that digitalization can cause a disruptive change to organizational practices but with an intention of enhancing the efficiency of operations and promoting sustainability. The research shows that while the case companies underwent digital transformation, their digital business models adapted in accordance with effectuation logic and causal logic. While making the transition to new platforms, among other things, all of the companies used causal reasoning. Successful product development and network tweaks at the case companies were the result of the employment of effective logic.

Companies producing video games in particular depended on effectuation to create memorable experiences for their customers. Changes in revenue structures and the transmission of value were unaffected by effectual logic. Bouncken et al. (2021) also explored and analysed the primary elements of the digitalization of business models and its impact on value creation and customer relationships in Germany. The authors developed a conceptual matrix of factors associated with business model digitalization. The digital client, the digital workplace, the digital infrastructure and operations, and the digital goods and services are the four pillars of digital transformation. The

writers provide an in-depth analysis of the fundamental ideas behind digitalizing company models. The authors provide a conceptual matrix for assessing the impact of digitalization on a company's portfolio. They provide an overview of the seven articles included in this issue and provide suggestions for further study of the impact of technology on the workplace and the way businesses present themselves online.

Cognitive inertia was shown to be a barrier to digitization and creative business models, making it harder to spot issues and adopt new solutions. Knowledge sharing and the discovery of gaps in existing stores of information are two key drivers of business model evolution. Knowledge production, and notably collaborative creation in connection with sense making, has the ability to initiate reorganizations in the way that businesses operate. Cennamo et al. (2020) conducted a review on the diffusion of digital technologies in the transformation of organizational processes, structures and interactions in the United States. The authors found that the alterations brought on by digital technology are non-linear, murky, and combine with the already existing challenges encountered by managers. The articles in this Special Issue show that new principles and new tools are needed to deal with the peculiarities of the digital age, such as how to manage and organize the integration of human and AI intelligence, how to manage and organize pervasively connected systems, how to manage and organize rapid experimentation, and how to manage and organize for sudden shocks.

3.0 METHOD

To achieve the aim of structuring extant research on the topic of interest, the authors adopted a systematic literature review as outlined by Kraus et al. (2020). The three-step review framework involved planning, conducting and reporting the review. In the first step, the authors developed a literature review protocol that outlined the inclusion and exclusion criteria of the review. The relevant and applicable articles for the study were collected from multiple bibliographic databases containing journals, patents, congressional proceedings and the sources of cited references to provide a comprehensive overview of the topic. The authors searched for publication titles, keywords and abstracts for published research between 2018 and 2023 that focused on the topic of research. The authors then applied the inclusion and exclusion criteria to exclude the articles that were not relevant for achieving the objectives of the review. Also, the chosen articles had to be written in English language and within the subject areas of business and management. The chosen articles had to be published in ABS journals with a ranking of 2 or higher.

The authors applied different techniques and procedures to meet the set objectives of the systematic review. First, to determine the thematic evaluation of the digitalization research, the authors investigated the annual distributions of the research, the most frequently cited authors, publisher, country of origin and the number of citations. Secondly, the authors analysed the articles on the basis of the keywords to provide an insight on the description of the article content, patterns and trends. Further, the authors formulated a co-occurrence word analysis bibliometric matrix that links the any two articles with the same citation. The larger the scope of the bibliometric matrix, the higher the chance that the two publications share the same research objectives. The co-occurrence of keywords shows similarity of ideas covered by the different articles. Generally, an important inclusion criterion for the articles was the depiction of central topics based on intellectual structures of knowledge. During the formulation of the co-occurrence bibliometric matrix, the

authors employed the social network theory for positioning of the network keywords. The final grouping of the chosen articles was based on their content.

4.0 ANALYSIS

The articles included in the systematic review were based on the analysis of findings by the number of articles, analysis of keywords and analysis of the co-occurring words. The analysis of the included articles was done based on a chronological evolution of the published articles and the number of citations associated with the topic of interest published between 2018 and 2023. The average year of the published articles was 2020, and the articles published before 2017 were considered as foundation layers for the domain of the research. A lot of interest has risen in digitalization research, most notably after 2017, and has gained unexpected momentum in terms of the number of published articles. The included articles had an average of 15 times of the number of citations, with more than half of the articles being cited more than 20 times. The article with the highest number of citations was by Vial (2019) with a total of 109 citations. The authors further organized based on the country of origin with U.S and Germany being the most active in terms of the number of articles. Other articles originated from Italy, Canada, France and the U.K.

In terms of analysis of keywords, the authors searched for frequently occurring words in the titles and keywords of the abstracts of the articles. The high-frequency words found in the titles of the included articles were 'digital', 'transformation', 'big-data', 'innovation' and 'businesses. The most popular keywords of the abstracts were 'value creation', 'business model', 'sustainability' and 'change management'. Other keywords of the selected articles included 'dynamic capabilities', 'information research', 'digital platforms' and 'knowledge management'. To certify the accuracy and reliability of the included articles, the authors analysed the keywords to learn about the possible research trends associated with the topic of research over the years. According to the results of the analysis, in 2018, the common keywords of the abstracts of the included articles were 'innovation', 'strategy', 'big-data'. The common keywords used in 2019 were 'Industry 4.0', 'value creation' and 'big-data'. In the last three years, the common keywords were 'Industry 4.0', 'artificial intelligence' and 'value co-creation'. Based on the change in patterns and trends of the common keywords in the past few years, the dominant themes and areas of interest of research have become clear, specifically in areas of change management, sustainability and customer experience.

To analyse the co-occurring words, the authors formulated a network diagram with the co-occurring words of the keywords. The network diagram showed the cluster of the keywords for the formulation of the thematic clusters of interest. The authors used cluster analysis to reveal the closely related co-occurring keywords with at least two co-occurrences. The authors assigned each cluster a unique color code to determine the relationships between the co-occurring words. Based on the network diagram, there were six thematic areas of research associated with digitalization including sustainability, business models, competitive advantage, dynamic capabilities, customers' experience and value creation. Each cluster was analysed based on the content of the articles associated with the keywords. The three primary thematic areas of the research based on the interpretation of the clusters include the use of digital technologies, customer experience, structural changes and value creation. Based on the approach of the analysis of the articles, it can be hypothesized that the adopted methodological framework was important in achieving the objectives of the review.

Table 1: Summary of the articles reviewed

No	Author	Year	Keywords	Focus of article	Publishing Journal
1	Alexander & Rutter	2022	Transformation, digitalization, sustainability and customer experience	To investigate the relationship between digitalization, sustainability and customer experience	<i>Fashion practice</i>
2	Baber et al.	2019	Effectuation logic, digital transformation, innovation, digital business model.	To determine the role of effectuation logic in digital transformation of business models.	<i>Journal of Small Business and Enterprise Development</i>
3	Baiyere et al.	2020	Digital transformation, structural change, value creation and business process management	To investigate the role of digital transformation on business process management.	<i>European Journal of Information Systems</i>
4	Baptista et al.	2020	Transformation, digitalization, work configurations.	To determine the relationship between digital work and transformation of organizations.	<i>The Journal of Strategic Information Systems</i>
5	Bienhaus & Haddud	2018	Procurement 4.0, digitization, supply chain.	To determine the role of digitization in procurement and supply chain management systems.	<i>Business Process Management Journal</i>
6	Björkdahl	2020	Transformation, digitalization, value creation.	To investigate the strategies for digitalization in manufacturing firms	<i>California Management Review</i>
7	Bogers et al.	2018	Open innovation, transformation, digitalization, policies.	To conduct research on the elements of open innovation and digitalization.	<i>California Management Review</i>
8	Bouncken et al.	2021	Portfolio, digitalized business models, innovation.	To analyse knowledge-and innovation-based business models for future growth with a focus on digitalized business models.	<i>Review of Managerial Science</i>

9	Caliskan et al.	2021	Digital transformation, innovation, digital business model.	To investigate digital transformation of traditional marketing business model in new industry era	<i>Journal of Enterprise Information Management</i>
10	Cennamo et al.	2020	Value co-generation, digital transformation, innovation	To discuss management of digital transformation and its significance in business operations.	<i>California Management Review</i>
11	Chanias et al.	2019	Digital transformation, innovation, digital business model, structural change.	A case study analysis of digital transformation in a financial service provider.	<i>The Journal of Strategic Information Systems</i>
12	Chierici et al.	2020	Social innovation, digital transformation, capital.	A research analysis on strengthening digital collaboration to enhance social innovation capital.	<i>Journal of Intellectual Capital</i>
13	Crupi et al.	2020	Digital innovation hub, digitalization, SMEs.	To investigate the role of digital innovation hubs as a knowledge center for digitalization.	<i>Journal of Knowledge Management</i>
14	Dengler & Matthes	2018	Digital transformation, marketing models, customer experience.	To determine the impact of digital transformation in the labor market.	<i>Technological Forecasting and Social Change</i>
15	Di Gregorio et al.	2019	Employability, digital technologies, customer experience.	To investigate the role of digitization in marketing and human resource management.	<i>European Management Journal</i>
16	Ekman et al.	2020	Dual embeddedness, digital transformation, business processes.	To evaluate the role of dual embeddedness in the digital transformations of global business processes.	<i>Business Process Management Journal</i>
17	Fritze et al.	2019	Digital transformation, possession attachment, digital service technologies.	To examine the endowment effect of digital transformation for consumers' relationships with hedonic and utilitarian digital service technologies	<i>Electronic Commerce Research</i>
18	Garzoni et al.	2020	Digitalization, SMEs, value creation.	To investigate the digital transformation of SMEs.	<i>Management Decision</i>

19	Guy	2019	Digital technology, digital culture and the metric/nonmetric distinction	To investigate the relationship between digital technology, culture and the metric/nonmetric distinction	<i>Technological forecasting and social change</i>
20	Hanelt et al.	2021	Digital transformation, strategy and organizational change	A systematic review of the literature on digital transformation: insights and implications for strategy and organizational change.	<i>Journal of Management Studies</i>
21	Jarvenpaa & Standaert	2018	Digital probes, digitalization, innovation.	To discuss digital probes as opening possibilities of generativity	<i>Journal of the Association for Information Systems</i>
22	Jocevski et al.	2020	Business models, mobile payment platforms, digitalization.	Explores the growth challenge of mobile payment platforms	<i>Electronic Commerce Research and Applications</i>
23	Kohtamäki et al.	2019	Digital servitization, firm theory, business models, ecosystems.	An integrative review on digital servitization business models in ecosystems	<i>Journal of Business Research</i>
24	Koltunovych & Lalipour Dizaji	2022	Sustainability, digitalization, SMEs.	To investigate the impact of digitalization competencies on the firm's sustainability in small and medium sized enterprises (SMEs).	<i>Master's Thesis</i>
25	Kraus et al.	2019	Digitalization, digital innovation, entrepreneurship	An analysis of the significance of digitalization in entrepreneurships.	<i>Review of Managerial Science</i>
26	Kraus et al.	2020	Digital transformation, structural change, dynamic capabilities.	An overview of the state of the digitalization research.	<i>Sage Open</i>
27	Kraus et al.	2021	Digitalization, digital innovation, entrepreneurship, consumer behaviour.	A review of the impact of digital innovation on entrepreneurships and consumer behaviour.	<i>International Entrepreneurship and Management Journal</i>

28	Moghrabi et al.	2023	Digital innovation, transformation, sustainability.	To investigate digital transformation and its influence on sustainable manufacturing and business practices	<i>Sustainability</i>
29	Savastano et al.	2019	Online–offline purchasing, technology, digitalization.	An analysis of technology adoption for the integration of online–offline purchasing: omnichannel strategies in the retail environment	<i>. International Journal of Retail & Distribution Management.</i>
30	Seepma et al.	2021	Digital transformation, structural change, value creation and business process management	Designing digital public service supply chains: four country-based cases in criminal justice.	<i>Supply Chain Management: An International Journal</i>
31	Sivarajah et al.	2020	Big data, social media analytics, sustainability, web context	To investigate the role of big data and social media analytics in promoting sustainable business practices.	<i>Industrial Marketing Management</i>
32	Upadhyay & Khemka	2020	Social identity creation, social Networking, usage intensity	To understand the linkage between social identity creation and social networking site usage: the moderating role of usage intensity	<i>Journal of Enterprise Information Management</i>
33	Vial	2021	Digital transformation, customer experience, value creation.	A review and research agenda for understanding digital transformation.	<i>Managing Digital Transformation</i>

5.0 FINDINGS

The first cluster contained the articles that focused on the impact of digitalization on structural changes and value creation. The articles focused on the necessary changes associated with digitalization at the organizational, sector and industry levels. A research article by Bogers et al. (2018) investigated the impact of digitalization in business management and discussed the possible associated development effects, while another article Chantias et al. (2019) concluded that digitalization changes the operations, products and processes of businesses, which might lead to the formulation and adoption of new business models. Another research article in the first cluster was by Di Gregorio et al. (2019) which investigated the change disruptions in marketing caused by digital transformation. Other articles included Baber et al. (2019) that explored the evolution of digital business models and its relationship with effectuation and causation logics, and Chierici et al. (2021) that investigated the impact of digitalization on social motivation and positive change

management. Also, another study by Dengler & Matthes (2018) analysed the impact of digitalization on the labor market.

The second cluster contained articles that addressed the impact of digitalization in the context of business-to-business (B2B) and Industry 4.0. A research article by Bienhaus & Haddud (2018) investigated the role of digitization in procurement and supply-chain management, and identified the possible barriers to digitalization and how to overcome them. Other articles included in the second cluster were Bjorkdahl (2020) that discussed the digitalization efforts in manufacturing firms and Crupi et al. (2020) that investigated the role of the European digital innovation hubs as knowledge brokers in supporting the digital transformation of small and medium-sized enterprises (SMEs). Also, Garzoni et al. (2020) analysed the role of digital technologies in triggering change in business operations of the small and medium-sized enterprises (SMEs). Another article included in the second cluster was Seepma et al. (2021) that explored the role of digitalization on redesigning the public service supply chains. Other articles focused on the role of social-media technology and big data analytics including Upadhyay and Khemka (2020), Sivarajah et al. (2020) and Rahrovani (2020).

The focus of the articles of the last cluster was the role of digitalization in influencing consumer behaviour and customer experiences. Fritze et al. (2019) conducted a quasi-experimental study to examine the effect of digital services on consumer behaviour while Hazee et al. (2020) investigated the barriers associated with digital technologies in B2C contexts. Another research study by Jocevski, Ghezzi and Arvidsson (2020) investigated the role of digitalization on the innovation of business models and practices based on rethinking of relationship management, development of collaborative partnerships and integration of the proposed digital technology. Other studies included in the last cluster included Savastano et al. (2019), Scuotto et al. (2020) and Santos et al. (2019). The three studies focused on the role of social media platforms in addressing the societal changes associated with the transformation of the technological environment. The research articles included in the last cluster predominantly focused on the significance of digital transformation in the B2C and Industry 4.0 contexts.

6.0 DISCUSSION

According to the findings of the systematic review, digitalization research focuses on three primary thematic areas including the structural changes and value creation, the use of digital technologies and customer experience. Digitalization research has an internal perspective which focuses on the role of digital technologies in strategic planning, improving dynamic capabilities and promoting sustainable practices, and an external perspective that addresses structural change and its consequences at organizational and sector levels. Against the backdrop of possible and actual consequences of digital transformation change, a large proportion of the research also focuses on new forms of value creation. The findings indicate that the internal and external perspectives of digitalization research are applicable in the B2B and B2C. In the B2B context, digitalization is used to improve products, processes and procedures in an organization, and an important factor in the adoption of sustainable business practices. In the B2C context, digitalization is important in improving collaborative and positive relationships with the consumers to enhance customer experience. Perhaps, based on the findings, it is arguable that the researchers focus on technology in the B2B context and people in the B2C context.

The findings of the systematic review show that most research studies focused on the role of digitalization of business practices and their influence on consumer behaviour. The results of the research studies show that digitalization of business processes and operations such as procurement and supply chain management can yield several organizational benefits including creation of new business models, products and supporting organizational efficiency. The research further show that digitalization of business practices can create a positive shift to the supply chain business processes through robotic automation of operations, artificial intelligence and blockchains. Also, digitalization research show that digital technologies can be used in advanced manufacturing processes to modify the upgrading patterns in manufacturing subsidiaries. Drawing upon the literature on digital transformation, it is reported that the fundamental concepts of digitalization include dynamic capabilities, resource allocation, fungibility and sustainability for value-creation and appropriation. The research show that digitalization can be used as a tool for improving the absorption of knowledge to enhance innovation and strategic renewal.

In terms of consumer behaviour and experiences, the results of the research studies show that digitalization is an impact factor on the process of consumer-purchasing as a new mode of creating information and technology-based communication. The results further show that the digitalization of retail process in the supply chain system can be used to develop a conceptual framework for delineation of consumer behaviour patterns and structural concepts of retailer-consumer interface. Also, it is reported that digital transformation is playing an important role in the rethinking of relationship management with retailers, development of collaborative relationships with stakeholders in the payment system and delivery of proposed customer experiences using front-end mobile technology. The research studies further reported that the widespread of digital technologies in business and daily life has led to the development of a new set of shared beliefs among the consumers which has enhanced their experiences and promoted democratized access. Based on the results of the review, it can be hypothesized that the proposed framework of the research has brought together and linked relevant and recent research avenues associated with digitalization of business practices.

7.0 CONCLUSIONS

The systematic review has mapped the thematic evaluation of digitalization research in business and management. The review identified and analysed the top articles based on analysis of keywords, co-occurring words, and the number of citations. To achieve the primary objective of the paper, the authors employed different methodological and analytical procedures to discern the dominating themes associated with the topic of interest. The authors searched multiple bibliographic databases containing journals, patents, congressional proceedings and the sources of cited references to provide a comprehensive overview of the topic. The analysis of the included articles was done based on a chronological evolution of the published articles and the number of citations associated with the topic of interest published between 2018 and 2023. The three primary thematic areas of the research based on the interpretation of the clusters included the use of digital technologies, customer experience, structural changes and value creation. Based on the approach of the analysis of the articles, it can be hypothesized that the adopted methodological framework was important in achieving the objectives of the review.

According to the results, digitalization changes the operations, products and processes of businesses, which might lead to the formulation and adoption of new business models. The

findings indicate that the internal and external perspectives of digitalization research are applicable in the B2B and B2C by promoting the adoption of sustainable business practices and improving collaborative and positive relationships with the consumers to enhance customer experience. The research further shows that the digitalization of business processes and operations such as procurement and supply chain management can yield several organizational benefits including creation of new business models, products and supporting organizational efficiency. The digitalization research show that digital technologies can be used in advanced manufacturing processes to modify the upgrading patterns in manufacturing subsidiaries and as a tool for improving the absorption of knowledge to enhance innovation and strategic renewal. Based on the results of the review, it is clearly apparent that research on digitalization has increasingly gained interest which has further opened up other areas for future research.

8.0 RECOMMENDATION

Before committing to new technology, businesses should think about their future and how it could be affected by digital disruption. The customer experience should be rethought in light of client feedback in order for businesses to succeed. In order to thrive, businesses must tailor their offerings to each individual customer. A customer relationship management system (CRM) is essential for businesses to track customer information and tailor their services to each individual. Customers want the ability to shop across several channels without any interruptions. By centralizing all customer interactions in a single digital profile, businesses can provide services that are prompt, individualized, and simple to obtain.

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