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Management Strategies for Digital Transformation

Thrive in constant change

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MASTER THESIS

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Title: Management Strategies for Digital Transformation - Thrive in constant change

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Date: 2.5.2022   Number of pages: 67   Appendices: 0

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Abstract

Companies of all types and sizes in the dynamism and unpredictability of today's marketplace, have been investing seriously with a big amount of money in the digitization of their business models, and operating in the modern business landscape are increasingly finding themselves managing numerous employees, customers, and products. Because of the rapid upheaval, many tech companies introduced their new technologies constantly, and appearances of new market opportunities and shifts in the way how their consumers choose, interact, and adopt the standards to their demand. Companies, therefore, were investing in the reimagining of their business models as a result of the changing consumer expectations. Digital transformations with technology, innovative potential in business models and processes, as well as formulation of more comprehensive strategies are playing an increasingly significant role in making a business more sustainable and more effective in the long term.

This research paper associates an academic literature review with the Meta-synthesis approach developed by Hoon and tries to shed light on this interesting topic by accommodating academic and practical insights. And with those challenges and under pressure to change to achieve relevance in the new business landscape in the Fourth Industrial Revolution. Modern businesses should consider managing digital transformation in their management strategies and learn to adapt to new advancements simultaneously with innovating to stay ahead of the competition by adopting new digital technology convergence, such as Robotic Process Automation, Artificial Intelligence, Blockchain, Virtual Reality and Augmented Reality, etc. And the result will lead to the creation of a viable, safe, cost-efficient, and successful strategy as well as help businesses increasingly enhance more agile, lean, interactive, and customer-centricity.

In general, 81 sample articles were collected from the four databases and after 6 research steps of the meta-synthesis method and step of comparative and analysis. The eventual result is to formulate the digital transformation strategies framework and contribute with a set of 15 strategies in 6 action fields. The contribution of this research suggests the management strategies by applying or associating them with their business based on the context of the company. As the result, companies can accomplish successfully face the challenges of digital transformation. This study is beneficial to company managers who want to find management strategies to successfully implement the digital transformation process in today's business world of constant change.

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Language: English
Key Words: Digital transformation, digitalization, digitization, management strategies, change

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Abbreviations

ECLAC	Economic Commission for Latin America and the Caribbean
UNCTAD	United Nations Conference on Trade and Development
OECD	Organisation for Economic Co-operation and Development
EIOPA	European Insurance and Occupational Pensions Authority
DT	Digital Transformation
FSP	Financial service providers
IS	information systems
CDO	Chief Digital Officer
CIO	Chief Information Officer

1 Introduction

Digital transformation is the employment of data-driven innovation, and cutting-edge digital technologies in order to generate greater value for the organization and its stakeholders. Organizations will undergo a transformation process, which involves building or innovating their business operations, business models, products, services, and relationships. (Philippart, 2022). In our unceasingly changing world, the digital transformation of the company can be seen as a momentous and impactful event in the organization's business administration related to exploring and exploiting the potential of new digital technologies (Hess et al., 2016). Despite the fact that digital technologies have had an enormous influence on forming an environment of quickly changing competitive and customer dynamics. These technologies have also led to many challenges of digital transformation to organizations, such as increasingly unpredictable market, disruptive new entrants, obsolete business modes, improper processes and structures, unappreciated culture, and learning (Perkin, 2020). Because of that, digital transformation is complicated and necessitates a new strategy to approach these challenges (Review, 2021).

Industry experts and professionals concurred that any all-inclusive business strategy must include digital transformation as an integrated and constant component (Schallmo & Williams, 2018). Moreover, management strategies, knowledge, innovation, motivation, leadership, and collaboration are the significant factors in a digital transformation that help companies achieve sustainable development (Ziadlou, 2021). A new management strategy is needed to play an important role in highly supporting and building flexibility and agility in organization cultures which must be obtained in order to master the digital transformation (Udovita, 2020). Therefore, a digital strategy will become a powerful disruption for changing the structure of traditional organizations and constructing a digital cultural environment with nonstop adaptation and innovations to market trends nowadays (Hrynko, 2019). Applying a digital strategy is an integral component of a company's gross business plan to increase the management system's effectiveness, competitive advantages, and creative business development.

And so, this master thesis will look into the digital transformation strategy in the organization, as the research focuses on how organizations could manage these strategies to succeed in the world of constant change.

1.1 Background

According to the newest McKinsey Global Survey on digital strategy and investments (LaBerge, Smaje & Zemmel, 2022), the survey results from the organizations' digital transformation statistics showed that they may have achieved a median of 31 percent of the revenue's full benefits and 25 percent of the cost's maximum benefit from their previous transformation investment. Through this, it can be seen that they have achieved from the value of tech-driven changes much less than they anticipated at the start. This also demonstrates that transformations are hard, digital transformations are even more difficult (McKinsey, 2018). The main reason why digital transformation is really difficult to implement comes from the failure of many changing efforts in all aspects of an organization, the core business, employees' reactions, and the impact on customers (Review, 2021). Hence, it is important for future business success that organizations need an obvious strategy for digital transformations in order to adopt and implement the new digital technologies (Hess et al., 2016).

Digital transformation strategy is a particular sort of management change since it can alter the business value creation, scope, vision, and revenues created by digital assets including the effective transformation of important operations, products, services, models, and processes of organizations (Rêgo, Jayantilal, Ferreira & Carayannis, 2021). From that, given the transformational effects of digital technology on both the external and internal environments of the organization, the formation and management of a digital transformation strategy have become a top priority for many businesses (Chanias, Myers & Hess, 2019). Thus, digital transformation, like any other new innovation, brings with it a great deal of uncertainty and challenge, and top managers are striving to identify the best method to adopt suitable management strategies in the context of continual change (Hess et al., 2016).

To summarize, a pressing need to research further on types of digital transformation strategies as well as define the crucial aspects, characteristics, and challenges to help the management obtain profound awareness of how is to be managed digital transformation successfully.

1.2 Problem Statement

Like every innovation, digital transformation has been accelerating and still undergoing for many decades. However, in the past few years, progress in public sector digitalization was slow, and the recent COVID-19 crisis and resulting lockdown brought both economic, social, and political challenges which have forced much of the world to speed up their transformation plans. Students with Internet access at home have been attending class remotely and many employees are working from home, as well as numerous businesses have adapted digital business models to maintain operations and preserve their revenue flow through significant and, possibly, lasting changes. (OECD, 2021)

According to Hess (2016), the business world is changing constantly with the rapid adoption of digital technology. Digital transformation covers all kinds of changes that happen in the presence of digital technologies. Digital technologies have been exponentially growing and profoundly changing the ways of business function through new digital processes and tools, and they have challenged existing business models, as the result, giving birth to new business models. The use of devices and applications employing cloud computing, big data analysis, blockchains, or artificial intelligence routine has been made by accelerating the technical progress in the digital realm (UNCTAD, 2021).

Additionally, McGrath and McManus in Harvard Business Review (2021) interpreted that the technological revolution combined with a change in management strategies helped the companies at the forefront of digital transformation. It has created exponential growth in the form of economic value creation and social impact. Companies, therefore, want to manage digital transformation effectively, they need to reevaluate, renew, and enhance their capabilities including human, collaborative, innovation, and technical capabilities for formulating their own management strategies that can make them more flexible in changing environments promptly (Rogers, 2016).

1.3 Research Context and Motivation

Many businesses consider successful digital transformation to be the holy grail, but it is actually difficult to achieve because the failure ratio is high (Nash, M. & Linder, N., 2022). According to UNDP's Administrator (UNDP, 2022), the COVID-19 pandemic has highlighted how digital connectivity is fast after becoming the global metric, it also recognizes that digitalization will continue to re-shape the way in which organizations

cope with the increasing challenges our world now faces. The organization's management strategies will prove the technological changes now and those yet to come. Besides that, the industrial Revolution emerged many improvements in manufacturing and service systems and other areas. These advancements emphasize a new industrial revolution, called the term Industry 4.0. It was the reason for the outbreak of the developments in manufacturing and information technology, the coordinated and communicative technologies, and leading to the increasing productivity both in service systems and the manufacturing environment. (Ustundag A., Cevikcan E., 2018).

One of the significant issues needs to take a consideration that is competition today as fierce as ever when markets become saturated and then the biggest challenge that companies are currently facing that is how to integrate and exploit new digital technologies. No size, type, sector, or organization is immune to the effects of digital transformation. Every business must eventually update its technology to keep pace with the competition. If they do not, they will lose gradually all of their market share in the industry, leading to a cut into their revenue stream, ROI, talent pool, creativity, and reputation. So, in order to gain a competitive edge and unlock the potential of digital economy technologies, a company needs to undergo a digital transformation (Elena et al., 2019).

If the managers look at digitalization from the perspective of business research, as many companies make the most of digitalization, the role of change management needs also to be improved to meet new challenges. In addition, managing digitalization and the transformation of business is an enabler of primary innovation and disruption in many company sectors. Managers of the company always find a way to elevate productivity and embrace technological advancement to bring impactful results in business operations. Hence, the novelty and complexity of the digital age have led to an increased academic interest in the area of digital transformation and companies were seeking support in this process. (Andersson et al., 2018).

1.4 Research Purpose

The purpose of my thesis is to research, and analyze clearly all the digital transformation's aspects, characteristics, and challenges and go deeply into the management strategy that companies are pursuing to obtain a successful change. With all the companies' efforts to

embrace digital transformation, I am convinced this is the right time to change and improve the new management strategies. This writing will attempt to create a profound understanding of what a company expects from digitalization. The expectations will include the company's ambitions of the implementation of digitalization and the growing demands of customers and technological changes in society. Based on this analysis, I identify future research opportunities.

1.5   Research Question and Objective

The goal of this thesis is to provide a digital transformation strategies framework that covers the following organizational design elements, strategy, organization, people/employees, culture, customer, and technology as aspects of change management strategy. Furthermore, this research aims to fill the gap on how business model innovation should be pursued through digital transformation and make an already proposed transformation model more practical for companies to apply. Accordingly, the main goal of this research is transformed briefly into the following central research approach which is how an organization can manage to achieve successful digital transformation.

In addition, the central research approach will be fragmented into the following specific objectives/sub-research questions:

Research Question 1 (RQ1): What are the digital transformation strategies in the organization?

Research Objective 1 (RO1): This first question aims to research according to published literature, the suitability and the feasibility of Digital Transformation as an approach for business adaptation in constant change.

Research Question 2 (RQ2): How to take advantage of digital transformation strategies successfully?

Research Objective 2 (RO2): The purpose of the second question is to design and propose digital transformation strategies or frameworks based on key factors.

1.6 Delimitations

Following from background information, the introduction of management strategies for digital transformation is a response to the challenges of managing the growing landscape of digital initiatives and related infrastructures (Dehnert, 2020). A digital transformation strategy is supposed to coordinate, prioritize, and implement the organization's transformation efforts as a long-term objective, to govern its transformed journey to achieve digitally the desired future state (Bounfour, 2016). Besides, the theory of digital transformation is discussed generally, whereas the aspect of change management strategies has been limited to the scope of the research purpose. Even though, its scope goes beyond the digitization of resources and involves the key organizational transformation aspects, the use of advanced information technologies (IT) or aspects of value creation, productivity improvements, cost reductions, and innovation including key products and services, leading to adjusted or completely new business models (Christian et al., 2015). In addition, due to differing definitions between literature and dictionaries, the author of this study refers to the following definitions regarding digital transformation, digitalization, and digitization.

2   Literature Review

The research focuses on a review of relevant theoretical concepts and perspectives and their applicability to this thesis, starting with the definition of digitalization, digitization, and digital transformation, followed by their relevance sides were defined and further refined while being used in the newest academic materials and search engines such as ProQuest E-book Center, Semantic Scholar, Springer, and ResearchGate. Furthermore, the author tried to summarize the current knowledge about digital transformation and highlighted that the literature on this topic mainly focuses on the expected positive impact of improvements to management strategies for digital transformation in terms of organizational performance and efficiency in the short to long period. For this reason, attempts to develop new contributions to understand the more profound long-term and higher-level effects of digital transformation on organizations have been lacking.

2.1   The Differences Between Digitization, Digitalization, and Digital Transformation

Three domains for understanding the diffusion of digital technology are 'digitization', 'digitalization', and 'digital transformation', which are the hottest topics in the current business environment. As the exaggeration around digital transformation in the present continues to persist, the terms 'digitization' and 'digitalization' join the fray, increasing the level of hype while there seems to be quite some disorientation regarding the usage of terms, such as digitization, digitalization, and digital transformation. Some of these terms actually changed over time (and some, which seem new, already were used in a totally different context many years ago and then disappeared again or were replaced completely) so not everyone uses them in the current meaning. In reality, people are confusing them in ways that shortchange the power and importance of digital transformation, therefore accidentally putting the very survival of their organizations in peril.

2.1.1   Digitization

According to Daniel and Christopher (2018, p. 5), "digitization is an attempt to digitally enable analog or physical artifacts with the ultimate aim of incorporating said artifacts into business processes in order to acquire newly formed knowledge and create new capturing values for the stakeholders". In addition, by the short definition's Peter High on

LinkedIn Learning (High, 2018), digitization is the conversion of analog or physical information to digital format, an example of this would be document scanning, where text from physical paper is converted into Word, Excel, PDF or other digital formats, which are then stored in the computer or cloud.

2.1.2 Digitalization

Also, according to Daniel and Christopher (2018, p. 6), " digitalization is value-added digitization initiatives accelerate business operations and business models through fundamental changes based on newly acquired knowledge". And Peter High's intelligible definition of digitalization is the use of digital technologies to enable or improve business models or processes (High, 2018). Using digitalized customer data from different sources to automatically generate insights from their behavior is an example of this.

2.1.3 Digital transformation

There is currently no single, commonly accepted definition for the term digital transformation. Hence, understanding the meaning of the word "digital" before examining the digital transformation of business models is crucial. As Daniel and Christopher propose utilizing a definition developed by McKinsey with three primary focuses (2018), including creating new value between the frontiers of the business world, optimizing the processes that have risks to the customer experience, and building base capabilities that support the entire overall business ideas.

Furthermore, Daniel and Christopher defined digital transformation as a sustainable, company-level transformation via revised or newly created business operations and business models achieved through value-added digitization initiatives, ultimately resulting in improved profitability (2018, p. 9-11). While according to Peter High, Digital transformation is a coordinated change effort at scale, diffused through all aspects of the business including people, processes, technologies, and metrics. The goal of this is to bring meaningful outcomes to the organization. Integration of various digitalization initiatives, such as augmented reality guided instructions, and 3D printed tools that have the internet of Things-enabled sensors connected with them can result in the fundamental transformation of the manufacturing process (High, 2018). A more ambitious example would be the integration of the company's customer sales volumes feeding though to the

company's raw material vendors, thus integrating the supply chain for greater efficiency and response. In addition, extracted from the research by Vital (2019) which presents a few examples of different types of definitions in the following table (Table 1), they can be found in the academic literature, and their conceptual issues were additionally identified clearly by the author:

Definition	Source(s)	Conceptual clarity challenge(s)
Use of digital technologies to radically improve the company's performance	Bekkhus, (2016)	Unclear term: *"digital technologies"*. Conflation between the concept and its impacts.
Digital transformation strategy is a blueprint that supports companies in governing the transformations that arise owing to the integration of digital technologies, as well as in their operations after a transformation.	Matt et al. (2015)	Unclear term: *"digital technologies"*. Circularity (**"transformation"**).
Digital transformation is concerned with the changes digital technologies can bring about in a company's business model, which result in changed products or organizational structures or in the automation of processes. These changes can be observed in the rising demand for Internet-based media, which has led to changes of entire business models (for example in the music industry).	Hess et al. (2016)	Unclear term: *"digital technologies"*. Conflation between the concept and its impacts. Lack of parsimony.
The use of technology to radically improve performance or reach of enterprises.	Westerman et al. (2011)	Conflation between the concept and its impacts.
Digital transformation describes the changes imposed by information technologies (IT) as a means to (partly) automatize tasks.	Legner et al. (2017)	Conflation between the concept and its impacts.

Table 1. Digital Transformation definitions (Vital, 2019)

The parallels and the essential properties of a digital transformation definition were identified by Vital (2019) by using a semantic decomposition between 23 unique definitions. As a result, he defined digital transformation as a process by which significant changes are triggered to an entity's properties using a combination of information, computing, communication, and connectivity technologies (Vital, 2019, p. 118). For this research paper, this definition will be used as the basis.

2.2 Relevance of Digital Transformation and the importance of management strategies in the constant change

Every aspect of a company is impacted by digital transformation and the consequent innovation of business models (ECLAC, 2021). Andersson et al. (2018) also explain that because of the fast pace in this Age, companies, and industries are facing challenging transition processes and because of this, the future appears to be less predictable for many, which threatens the existing competitive position of the company. According to Hess et al. (2016), to remain competitive in their industries, business leaders need to deal with the transformation challenge and formulate an adequate strategy for their company. Because digital transformation has a considerable impact on the competitive environment that companies are operating. Traditional companies and companies in transformative progress, therefore, have to obey the transformation pressure to survive and develop. Besides, by replacing costly labor force with digital tools or making the company processes more efficient, the new digital technologies also have the possibility to affect the company's financial structure (Verhoef, et al., 2021).

Digital technologies nowadays also help many new types of digital products created by the recombination of existing business products and services (Herbert, 2017). Besides that, the ubiquity of digital technologies and the resulting massive explosion of data promote the generation of data that can be analyzed and used by companies to perform business procedures more efficiently or react promptly to their customers' demands and, as a result, create a power shift and increase their competitive advantage (Bounfour, 2016). It is easy to see a similar focus on customer engagement and innovation between companies that are finding technologies to grow strategic distance from competitors, and in McKinsey's research (Figure 1), related results suggest that doing so is becoming a more common goal, top-performing organizations also reported bolder strategic aspirations and bigger bets on tech becoming a global trend (LaBerge et al., 2022). According to Hess et al. (2016), achieving the benefits of digital technologies, such as productivity improvements, cost reductions, and innovation is the main purpose of the digital transformation journey which needs a particular strategy for deploying, hence, exploiting digital improvements is key to future success.
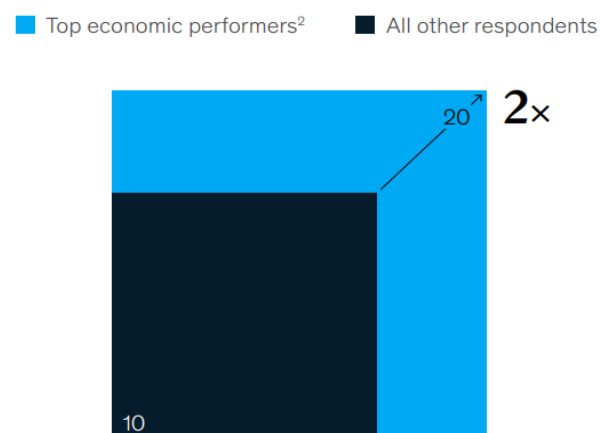
Compared with peers, the top economic performers report bolder strategic aspirations and bigger investments in new digital businesses.

Expectations for organization's digital technology, next 2 years, % of respondents

Role that digital tech will play in achieving strategic aspirations[1]
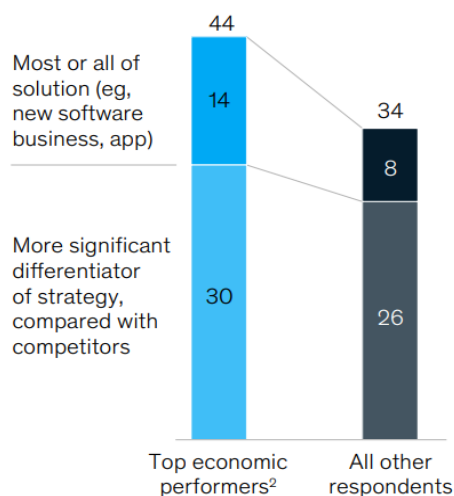
Share of digital-tech spending that will be allocated to building new digital businesses[3]

Top economic performers[2]   All other respondents

Most or all of solution (eg, new software business, app)

More significant differentiator of strategy, compared with competitors

Top economic performers[2]   All other respondents

44   14   30   34   8   26   20   2×   10

[1]Respondents who answered "no significant role," "a minor enabler," "a significant enabler," or "don't know/not applicable" not shown. For top economic performers, n = 162; for all other respondents, n = 913.
[2]Companies with respondents who reported increases of ≥15% in their organizations' revenue and EBIT over past 3 years.
[3]Respondents who answered "don't know/not applicable" not shown. For top economic performers, n = 113; for all other respondents, n = 614.
Source: McKinsey Global Survey on digital strategy investments and transformations, January 25–February 4, 2022, of 1,331 business leaders

Figure 1. Expectations for organization's digital technology (LaBerge et al., 2022)

In addition, in the new era of connected commerce, commercial and payment operations are seamless, allowing customers to focus on what is truly important to them. The millennial consumer is quick to adopt new technologies in everyday life, their expectations and perceptions have been profoundly altered and impacted by innovations (Maheshwari, 2019). The epidemic and mandatory lockdowns have generated a demand for new digital channels to maintain social and civil practices, many customers have been increasingly making online purchases, and a company's digital presence influences both offline and online transactions that can save time, simplify their everyday tedious tasks, and make life more enjoyable (ECLAC, 2021). As a result, the author Verhoef (2021) claims that corporations that are unable to adapt to new digital standards are losing customer appeal and being replaced by the ones that can.

According to McKinsey's survey results (2022), the top economic performers that faced the digital transformation challenge are focused on customer engagement and innovation strategies over the next two years to differentiate their entire company strategies from rivals. To Hoffman's opinion (2018), defying old corporate conventions in terms of customer interaction, innovative digital technologies are changing consumer perception,

and hence their use may become the new standard. Companies, therefore, are conducting a digital transformation with an impact on the customer relationship, aiming for optimizing the processes that directly affect the customer experience (Schallmo & Williams, 2018). So, Herbert (2017) interprets that in order to be successful and achieve that goal, companies have to understand their customers deeply and carefully craft the management strategy to align with the customer's needs before the digital transformation. Strategy can be seen, it plays an important role in the digital transformation process and when comparing competitiveness, strategy-related issues produce a greater disparity between digital leaders and average performers (Udovita, 2020). Furthermore, this in-depth understanding can be increased over time, as formed gaps, and, with the continual advent of technological change, a new type of media channels (Herbert, 2017).

2.3 Dimensions of Digital Transformation

ECLAC (ECLAC, 2021) demonstrated that digital technologies facilitate business improvements or develop a new business process to create customer value. However, Dr. Baker assumes (2014), if there is no coherent long-term plan, uncertainty regarding the strategy's implementation and the capabilities of new innovative technologies causes businesses to fail in their digital transformation process. Furthermore, one of the probable explanations for digital transformation failures is that they appear to be managed instinctively rather than strategically planned (Stone, 2019). Digital transformation plans, therefore, emerge from a business-centric perspective and focus on the transformation of various aspects within a company environment via the use of innovative technology that was expounded in digital transformation strategies research (Matt, Hess & Benlian, 2015). According to Tarafdar and Davison (2018), it is important to take a cross-disciplinary approach to digital transformation since it involves several functional areas such as marketing, operations management, and information technology systems rather than studying one field in isolation so that relevant aspects of the interdisciplinary intersections are not ignored.

Experts like Matt et al. (2015), (2016) claim that the conceptual framework for developing a digital transformation strategy defines the four essential dimensions (Figure 2) of any digital transformation effort, regardless of the industry type, that is repeated in practically

every transformation process. This perspective is also interpreted by other scholars (Udovita, 2020), (Korachi, Bounabat, 2020) that those factors are similar to digital transformation frameworks because the strategic focus of any firm is largely on sustainable growth and long-run profits.
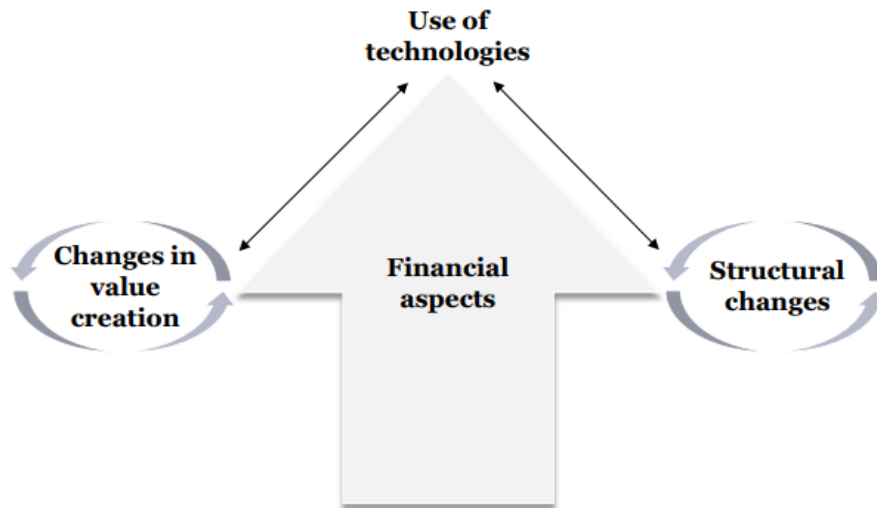
Figure 2. Framework for dimensions of digital transformation Matt et al. (2015)

First dimension, technology is assuming a critical part in empowering capacity and accelerating beyond any difficulties with enormous benefits across companies during pandemics and crises (Kennedy & Bray, 2020). However, the application of technologies concerns a company's attitude toward emerging technologies as well as its capacity to capitalize on these innovations to achieve growth and establish a competitive advantage (Figure 3) (Aagaard, 2019) (Vital, 2019). Organizations, therefore, must identify an obvious strategy to take benefit of innovative technologies to provide organizations with a standard digital transformation framework in order that builds the general digital transformation approach regardless of the digital transformation context (Uchihira & Eimura, 2021). A clear technological roadmap is also provided to assist managers in developing Industry 4.0 strategies, it will help them wisely to select core technologies, determine projects, build and optimize project portfolio risk, and manage the project schedule planning (Ustundag A., Cevikcan E., 2018).
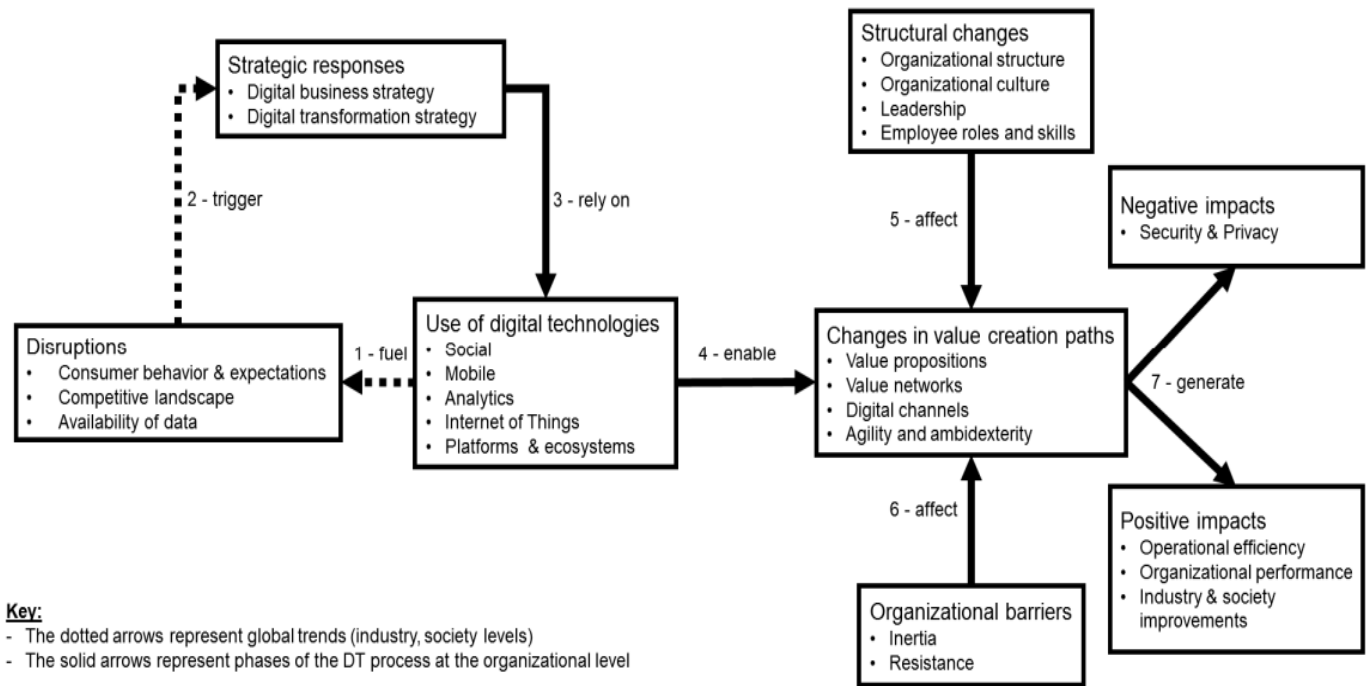
Figure 3. Building Blocks of the Digital Transformation Process (Vital, 2019)

Next, the author Rogers (2016) also explain that digital transformation strategies affect organizations' value chains and firms' value creation through changes in value creation produced by technologies, and this also necessitates based on a range of theoretical and practical insights from strategic management, process engineering and organizational sciences (Sirisukha, 2020). As result, digital transformation generates major changes in the organization of firms and market dynamics; regarding value creation at the enterprise level, such as greater operational efficiency, better decision-making, greater connectivity, and new business models (ECLAC, 2021). Then, Matt et al. (2016) also clarify that a structural change involves changes to a firm's organizational setting, such as reorganizing the organization's new digital activities, and these changes will mainly affect the organization's products, processes, or management skills. In addition, these changes must be properly established in order to leverage digital technology for the organization's benefit while remaining within financial constraints (Vital, 2019). Finally, Matt et al. (2016) explain that increasing financial strain on the present core business may be the catalyst that convinces management that action is required, and that financial resources will be necessary to implement transformational initiatives. Nevertheless, company size is an important factor in information technology investment decisions across all industries

(Vital, 2019) and beyond the technical or financial feasibility of these technologies, digital advancements account for the public's desire to accept them (ECLAC, 2021).

The dimensions of this ontological model are all constituted from the literature. Nonetheless, due to sectoral concerns and the digitalization approach used, none of the evaluated studies covered them entirely (Zaoui, Assoul, Souissi, 2019). Its components are embodying the foundation of a digital transformation. It, hence, provides an awareness of the important components rather than management guidance for the transition. That is one of the motivations for my research, to integrate the diverse methods of digital transformation into a general ontology-based model that is exhaustive and adaptable to varied circumstances.

2.4 Stages of Digital Transformation & Effects of Digital Transformation Strategies

To understand digital transformation more clearly, academic scholars such as Udovita (2020), and Verhoef et al. (2021) differentiate between three stages in the transformation process: Digitization, digitalization, and digital transformation with the goal of improving existing goods with leading capabilities. Additionally, researchers argue that the first two stages are requirements to reach the last and these 3 stages can be seen as 3 maturity levels of the digital transformation (Korachi, Bounabat, 2020). First, digitization is presented as converting process, technically from analog signals to digital signals (Saarikko et al., 2020). Moreover, digitization offers nearly limitless possibilities for connecting people, systems, processes, businesses, goods, and services. This indicates that, rather than supporting and expanding conventional ways of working, digitalization causes transformation (Aagaard, 2019). The second stage is Digitalization which entails capitalizing on digital opportunities to generate innovation (Korachi, Bounabat, 2020). Besides, digitalization describes an organization's synchronization of its business and IT strategies, as well as the adoption of information technology into its business plan (Udovita, 2020).

The last stage, digital transformation is manifesting itself as new management, business, and manufacturing paradigms that enable innovation and the entry of new markets while replacing gradually traditional industries (ECLAC, 2021). Additionally, digital transformation's nature is interdisciplinary, because it incorporates changes in strategy, organization, information technology, supply chains, and marketing (Verhoef, et al.,

2021). Therefore, the firms need to embrace one or more of the following methods, such as Design Thinking, Agile Approach, DevOps, Lean Practices, Quality Engineering, Automation, Behavioral, Development, and Data-driven Innovation; along with technologies and structures, such as Robotic Process Automation, Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning, Blockchain, Big Data, Cloud Computing, Augmented Reality, etc. to accomplish the digital transformation (Figure 4 (Maheshwari, 2019)). These methods and technology's functions are to gather, transport, and make sense of massive amounts of data in order to build organizations capable of meeting market demand for high-quality, personalized products and services (Cruzara G et al., 2020).

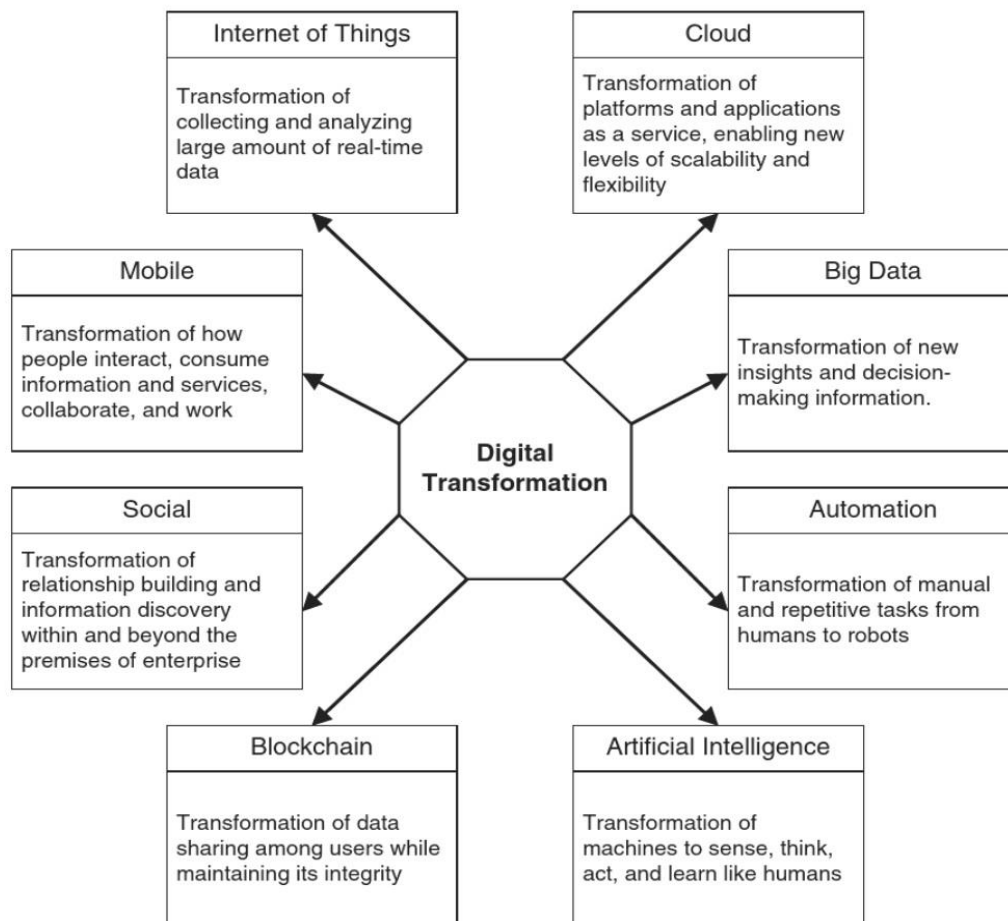*Figure 4. Digital Transformation key drivers (Maheshwari, 2019)*

The transformation process is linked to company-wide strategic changes brought about by the incorporation of new digital technology into business operations (Ustundag & Cevikcan, 2018, p. 97). These vast changes led to a variety of socio-technical difficulties and challenges. Thus, an effective transformation initiative requires a proactive strategy

regarding people, processes, technology, and most importantly their alignment within the organization (Sirisukha, 2020). Furthermore, it also generates significant industry disruptions and has an impact both on the business and on its communication with customers, rivals, and suppliers (Maheshwari, 2019, p. 8-10). The new innovative digital technologies that are included in the transformation process, which are extremely dynamic and complicated, enable cross-border industry disruptions and hence necessitate ongoing adaptation, a systemic approach, and new kinds of corporate strategies (ECLAC, 2021, p. 7-25).

2.5 The Digital Transformation's Key Challenges

The road leading to successful digital transformation is strewn with challenges that administrators must overcome. It's also concocting new strategic challenges not only with incumbents but also with the new digital disruptors and business model change is one of the major challenges that concern business development (Andersson et al., 2018, p.17).

There are many challenges in practice regarding digital transformation, such as traditional processes, resistance to change, legacy business mode, limited automation, budget restrictions, absence of relevant knowledge, Inflexible company structure, and security (Albukhitan, 2020). These types are able to classify whether the process is external (processes for transacting with customers, partners, technological improvements), or internal (processes for digital transformation strategies, HR management, or a supply chain) (Herbert, 2017, p. 71-87).

In the current business situation, due to existing value chains constraint, most traditional enterprises are struggling to employ the opportunity to broaden their relationships with their customers. Then, an external challenge comes from a network of partners with anachronistic business strategies, and the internal challenges often are regarding business model reinvention (Review, 2021, p. 180-182). Besides, Perkin and Abraham (2017, p. 21-22) argue that innovation speed within businesses regularly happens slower than the rate of technology change, and the consumer's behavioral change and technological change is exponential, while organizational change is logarithmic since it is dependent on variables that transition much more slowly (attitudes, mindset, structures, behaviors, culture) (Figure 5).

Perkin and Abraham (2017) also explain that the widening gap between these two curves, due to absorbability, response, adaptation, and mastery of accelerating technological change is critical to company success in the modern world, but most companies are simply too slow to handle it. Thus, in nonstop business development flow, companies are trying to play catch up with consumers and technology trends closely.
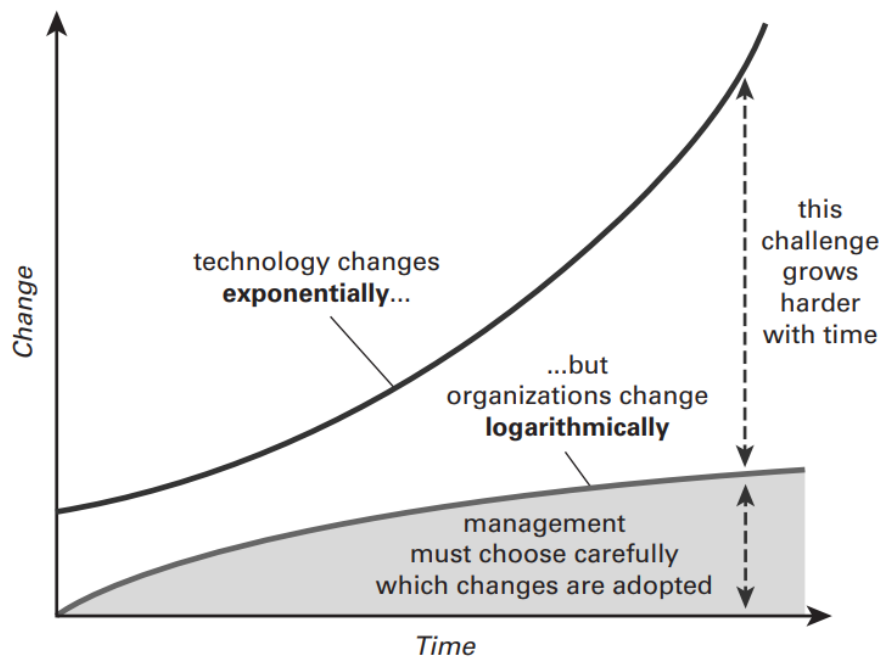
Figure 5. Logarithmic in organizational change (Perkin & Abraham, 2017)

Next, Kraus et al. (2021) assume that employees often tend to be resistant to digital change in successful companies which leads to difficulties in adopting digital transformation in the organization. Verhoef et al. (2021) explain that one of the reasons because the employees' lack of digital competencies and skills. Another reason is that as significant challenges as all these possible, these obstacles could be explained that cultural, hierarchical control, distrust of employees, and fear of risk can lead to firms blocking digital connections and preventing employees from effectively taking advantage of online technologies (Rogers, 2016, p. 47). As McKinsey's research (2018) and Maheshwari (2019, p. 1-7) demonstrate, empowering workers to work in creative ways, digital transformations necessitate cultural and behavioral shifts like measured risk-taking, enhanced cooperation, and customer-centricity.

According to Matt et al. (2015), Parviainen et al. (2017), and also Albukhitan (2020) with a common opinion, the lack of an effective digital transformation strategy as a critical

obstacle, so it has to be well formulated and aligned with other business strategies to reach to be successful. Besides that, Korachi et al. (2020) and Matt et al. (2015) emphasize that researchers scrutinize how the combination of an organization's information technology (IT) strategy with its business strategy builds value. Also, they argue that IT Governance boosts the connection between business and information technology and supports the organization's business strategy, thus, IT Governance solutions and frameworks can be exploited by digital strategy formulation.

In addition, due to the proliferation of Cloud apps, social media, and the widespread usage of smartphones encourages consumers to "sacrifice" part of their private data (Bounfour, 2016). Aagaard (2019) contends that security is one of the major concerns across all industries, requiring detailed knowledge of the potential threats and how to minimize associated risks. Companies, therefore, need a coherent data strategy in the digital transformation process to ensure data security, privacy, integrity, quality, regulatory compliance, and governance (Review, 2021, p. 59-65).

2.6 Success Factors for The Digital Transformation

LaBerge et al. (2022) in the newest McKinsey Global Survey on digital strategy and investments claim that in a world of constant change, success with digital transformations has always proven difficult to achieve and the challenge has even become more acute recently. Nevertheless, companies' digital adoption and the strategic importance of digital technologies are still expedited increasingly.

Owing to today's volatile and dynamic marketplaces, organizational flexibility is an essential prerequisite for increasing organizations' digital agility (Verhoef et al., 2021). Therefore, leading firms often focus on two main complementary actions to succeed in digital transformation: adjusting consumer value offerings and transforming the company's operations via using digital technology to increase customer connection and cooperation (Schallmo & Williams, 2018). Furthermore, companies are facing modernization obstacles in order to stay at the cutting edge of innovative technologies (Hrynko, 2019). Thus, senior leaders must own the latest digital comprehensibility. It is critical to employ these digital-savvy executives and totally exploit their knowledge in the right place (McKinsey, 2018).

Besides, Vital (2019) also explains that managers must instill a digital attitude in their businesses, as well as the capacity to overcome disruptions caused by the usage of digital technology. By supplementing newly acquired technical skills with digital transformation leadership, these managers will reshape their governance and culture. As a result, they can fulfill the transformation imperatives and condition their successful transformation (Philippart, 2022). From that, management must build a vision and emphasize to its staff the importance of digital transformation (Rogers, 2016, p. 35-61).

According to McKinsey's research results (McKinsey, 2018), leadership commitment with the engagement of transformation in key roles (executive leadership, the board of directors, and those in transformation-specific roles as chief digital officer (CDO), chief information officer (CIO) who are responsible for ensuring that digital technologies are correctly exploited and aligned with the organization's goals (Vital, 2019)) who are more involved, dedicated full time in a digital transformation effort will help a transformation's success is more likely. Also, like Rogers' opinion (2016, p. 35-61), managers across all industries agree that digitalization can only succeed with top management backing.

Because of the diversity of mindsets and worldviews, Garcia (2020, p. 49-53) argues that businesses must think and act strategically. They may implement a Talent Strategy that comprises competent frameworks, performance management, talent sourcing, succession planning, and many other human resource procedure. From the human resource management view, to successfully execute digital transformation, the organization must recruit and retain talented personnel or train current resources to apply the processes, tools, and technology proficiently (Maheshwari, 2019, p. 1-7).

Employees of enterprises, additionally, must get the necessary skills to fully exploit the new digital technologies brought about by digital transformation. Appealing to people with digital and analytical abilities to replace the existing workforce is implied by digital transformation since incumbents are competing for these skills with new digital entrants (Verhoef, et al., 2021).

Most of the successful companies had to abandon their original strategy, thus, surviving companies have to choose to maintain a high and coherent level of strategic adaptation and improvisation (Perkin & Abraham, 2017, p. 132-135). Moreover, organizations may get varied competencies, expertise, and resources by integrating numerous strategies with

a digital business plan (Kraus, et al., 2021). In the other words, to optimize business processes and support new strategies by delivering the technology infrastructure and foundation, IT and business strategy should be aligned (Perkin, 2020, p. 28-32)

DalleMule and Davenport (Review, 2021) also interpret that companies also need to build a consistent data strategy to protect data integrity and security, creating a suitable balance for both two types of data management: defensive (security and governance) and offensive (predictive analytics). Besides, the whole of corporate culture must adapt to the disruptive changes caused by the rapidly changing environment and breakthrough technologies (McKinsey, 2018). Thus, to adapt to the complexity of incessant change in digital transformation, businesses must develop organizational swiftness and agility. Furthermore, they must become digitally agile, which refers to the capacity to recognize and capitalize on market opportunities presented by emerging information technology (Philippart, 2022).

2.7 A Significant Review of Theoretical Framework

The focus of this part consists of building a reference theoretical framework based on summarizing all of the theory chapters' key issues above regarding digital transformation and management strategy. The author will use this framework to compare and assess the data being collected in the research's result section.

Action Fields	Key Issues	Target Points
Strategy	▪ *Digital transformation strategy*	▪ *Existence of a formulated digital strategy*
	▪ *Availability of sufficient financial resources*	▪ *The necessity of financial resources to implement transformational initiatives*
	▪ *Strategic foresight*	▪ *Exploration and evaluation of new trends*
	▪ *IT Governance*	▪ *Through connecting between business and IT strategy*
Technology	▪ *The exploitation of new technologies*	▪ *Increase organizations' digital agility*
	▪ *An obvious strategy/ technological roadmap*	▪ *To take benefit of innovative technologies*

	▪ Digitization of core IT system(s)	▪ Select core technologies wisely
	▪ A coherent data strategy	▪ IT security
Organization	▪ Digitally agile	▪ Organizational agility/ flexibility
	▪ Business model reinvention	▪ Adapt to the disruptive changes
Culture	▪ Freedom to experiment with new ideas/ fail forward culture	▪ Cultural and hierarchical control, distrust of employees, and fear of risk
	▪ Strong commitment with the engagement from management	▪ Documentation and communication of strategy from management
	▪ Digital leaders with the latest digital comprehensibility and skills; strong capacity	▪ To overcome disruptions caused by the usage of digital technology
Customer	▪ Hybrid client interaction channels	▪ Employ the opportunity to broaden the relationships with their customers
	▪ Customer centricity	▪ Customer insights/analytics, Customer Experience, Customer involvement in product development
People/ Employees	▪ Education and development of new skills	▪ Lack of digital competencies and skills
	▪ Cultural and behavioral	▪ Shifts as measured risk-taking, enhanced cooperation
	▪ Talent Strategy	▪ Performance management, succession planning, recruiting and retaining the talented personnel

Table 2. Digital Transformation Framework for Management Strategies

According to Bumann and Peter (2019), there are six action fields to dominate hypothetical issues and common cross-industry of digital transformation framework, and they are regarding the identification of the previous analysis chapters. The framework domains in Table 2. comprise strategy, technology, organization, culture, customer, and people/ employee along with key issues and target points which are the useful framework. It interprets that companies always keep their focus on incremental improvement and expansion and breakthrough innovation (Perkin & Abraham, 2017, p. 64-68). Thus these six action fields should be discussed in all digital transformation strategies.

Similarly, Butt (2020) contends this maturity and readiness framework incorporated the factors. They are sometimes overlooked across the digital transformation process and introduced in a structured methodology that may be used by companies to facilitate their digital transformation. Hence, if organizations want to go on the management strategy of digital transformation, they may assess themselves and overcome the difficulties of determining where to begin based on this framework (Ustundag & Cevikcan, 2018).

3   Research Method

3.1   Methodological Approach

In the following section, the methodology of this research paper can be defined as an inductive approach. By the definition's Saunders et al. (2016, p. 145), this research has a clearly defined purpose with research questions and objectives. Data were collected to explore a phenomenon, identify the theme, and explain the pattern, to derive general conclusions. The method within the scope of this research is clarified as an inductive research design exploratory which involves the identification of potential studies area, data extraction, analysis, and synthetic interpretation of qualitative case studies to make contributions beyond those achieved in the original studies (Moheret al., 2009). Due to developing understanding, the real argument is the strength of an inductive approach so, it can be seen as one of the most essential parts of the research process (Saunders, Lewis & Thornhill, 2016, p.147-148) (Woiceshyn & Daellenbach, 2018). At last, there was an emphasis on finding a solution for a business issue when performing this study; to acquire this answer, a pragmatic and applied research solution was established.

3.2   Research design

In this part, the descriptions and justifications for how and the reason why the approach was used. The technique chosen for data analysis will be revealed, followed by a presentation of the study sample, then, the chosen data for the analysis and synthesis will be demonstrated. And the last section, the quality of the research will be interpreted in terms of validity and reliability.

To conduct the research, a meta-synthesis approach to review qualitative literature on the topic of digital transformation was chosen to answer the above-mentioned research questions. The term Meta-synthesis was introduced first by Gene Glass (1976, p. 5) as "the Meta-analysis", then, it was reshaped by Atkins et al. (2008) & (Hoon, 2013). It is defined as an exploratory, inductive research method of synthesizing and re-interpreting primary qualitative case studies in order to build new theories or provide additional contributions that go beyond those made in the original studies. The reason for using this method is that meta-synthesis include transparency in data collecting and synthesis, which leads to greater objectivity and reproducibility. Besides that, it can improve

statistical meaning, provide better forecasts and impacts, obtain a more detailed analysis of benefits, investigate subcategories, and discover interconnection between them (Library, 2022).

To make the research clearer on how digital transformation management strategies affect the aspects of value at the organizations in continual changes. The author used the meta-synthesis protocol proposed by Hoon (2013, p. 523) (Prof. Dr. Christina Hoon specializes in the study of organizational and strategic transformation in diverse contexts, with a focus on strategy as practice, organizational sense-making, dynamic capacities, and qualitative research, specifically case study methodologies and qualitative meta-synthesis (Bielefeld, n.d.)). Also, the meta-synthesis method proposed by Hoon is composed of eight steps and is summarized. But because the research's purpose was explained in the previous section, the author followed only six steps of those in detail which are provided in the six subsections of the current study.

3.2.1 Framing the research question

This research followed a meta-synthesis literature review protocol that was developed and included the selection criteria of the study. By using the approach align with Hoon's (2013) protocol, following that it's imperative to frame a viable and valuable research question for the meta-synthesis based on a clear understanding of the phenomenon being used. The first stage is framing the research question by molding the research question for the meta-synthesis, then searching and reading scholarly articles on the topic of digital transformation & management strategies. The author's goal is to become more familiar with the topic, addressing the fewest discussions and, as a result, identifying theoretical gaps in the literature with a big focus on future research paths.

3.2.2 Locating relevant research

In the next section, following Hoon's instruction (2013) that identifies the corpus of dynamic capability (Teece, 2011) research suitable to the current research topic, then searching a full-scale literature search helps to avoid the exclusion of vital material and enhance the found results. This study thus examines numerous digital transformation strategies in order to extract and categorize their common aspects and to construct a basic strategy that frames and drives the creation of digital transformation strategies. It

is the identification of relevant articles in the field of digital transformation strategy that have investigated the notion of value and set criteria.

- ✓ *In the first phase, to find publications regarding the subject of digital transformation and management strategy, the following search terms with citations containing the primary keywords were characterized as "digital transformation" AND "management strateg*" AND "case stud*". The search engines were performed at the title, all text (content), abstracts, or keywords with time frame restriction within 10 years (from 2002 to 2022) to date at the databases ABI-Inform Complete - ProQuest Business Suite, SpringerLink, Emerald Insight, and Academic Search Elite.*

- ✓ *In the next second phase, in the Document Type and Publication Type of Applied filters, only articles, reports, and industry reports were chosen; written in English in the areas of Management were included in the language filter. Afterward sorting by Subject with digitalization, transformations, decision-making, research, strategic management, knowledge management, business, industry and market analysis, and quantitative analysis.*

- ✓ *In the third phase, in this phase, the selected papers after reviewing the titles and abstracts of the papers define the list of relevant articles and the most appropriate for the subject and purpose of research. The scientific literature related to title, topic, language, document type, and content is examined to identify the dimensions of the classification illustrated in Table 2.*

Depending on the web's search design, it will have various customizations and options related to title, topic, language, document type, publication type, and content. But after all, this phase in the thematic analysis is aim to reduce unnecessary data. Each phase's goal mainly was to identify dimensions of the classification and purify the number of articles based on predetermined criteria. As a result, there are 81 sample articles were collected from the four databases and analyzed at the next step (Table 3).

Stage	ABI-Inform Complete - ProQuest Business Suite	SpringerLink	Emerald Insight	Academic Search Elite
1	6,158	857	7	9
2	110	32	4	7
3	49	24	4	4

Table 3. Phases of the systematic search process

This section covers the choice of research method and the process of finding and analyzing the original research articles that were used to develop a scientific framework for the research. Because this research was conducted as a fundamental-applied study, thus the choice of articles and criteria was not limited by the availability of past research articles. The articles would be comparable with each other and then the results part, a methodology section that provided precise details of how the review was conducted (search strategy, selection criteria, main points used for the analysis and synthesis) (Saunders, M., Lewis, P. & Thornhill, A., 2016).

In the theoretical aspect, according to Hoon (2013), a meta-synthesis should be extensive and contain as many papers as feasible, the author also searched for published articles, journals, conference proceedings, reviews, and book chapters using scientific networks, reference lists, and active authors in the field of digital transformation to further identify consistent studies. However, this option still assures scientific rigor since peer-reviewed publication processes give at least one standard against which to pick papers.

3.2.3 Inclusion and Exclusion Criteria

The process of literature selection followed the stages, each phase had the purpose of refining the number of articles according to well-predefined criteria. In the empirical background, a number of the newest collected papers in the same field and criteria are reviewed in terms of data collection method, which used the meta-synthesis to develop the model or framework.

There are five precise inclusion and exclusion criteria (the method, theoretical foundations, research focus, initial research question, and quality) were specified and presented by Hoon's (2013) study in order to encompass the context of digital transformation and management strategy. So, the used analytical procedure in this step aims to develop an inclusion & exclusion criteria list including rationales. The listing content was modified to the research context and discussing clearly both criteria. Therefore, important inclusion criteria were employed to ensure the sample of publications which used properly for the analysis and purification, including to:

1) *The works of literature must discuss the digital transformation and management strategy as well as the aspects of value*

2) *Qualitative research strategy based on data gathered through focus groups, interviews, observations, or narrative approaches*

3) *A clear description of the analysis method*

4) *Using primary data and in-depth case studies*

5) *Appropriate and justified qualitative case studies approach*

6) *Stated clearly the research questions*

7) *Transparent description of the study context and the sampling method and data collection*

8) *Papers must present a consistent and reliable quality*

Also, once determining the corpus of dynamic capability research relevant to the concerned research topic. Following an extensive literature search, exclusion criteria were adapted for irrelevant articles or unimportant factors within the scope of the present research, which reinforces the results since they are based on a bigger foundation.

1) *Not the main topic of investigation*

2) *Using reviews or a quantitative approach*

3) *Not state the research method, theoretical framework, or study context*

4) *Not provide an adequate description of the research question*

5) *The inappropriateness of the qualitative methodology*

6) *Not demonstrate clear the role of the researcher*

7) *Not use purposefully collected data*

Analytical and Appraisal Criteria	Exclusion Rationales	Excluded Publications
Research Method	The inappropriateness of the qualitative methodology; using reviews or quantitative approach	6
Theoretical Foundations	Not state the research method, theoretical framework, or study context	35
Research Focus	Not the main topic of investigation. the paper's result is not suitable to the main topic of investigation	20
Initial Research Question	Not provide an adequate description of the research question	9
Quality	Not demonstrate clear the role of the researcher; Not use purposefully collected data	3

Qualified Sample		*8*

Table 4. The outcome of purified exclusion criteria

The author became acquainted with the data by screening and noting gathered articles carefully and after a look through the publications' full-text versions with determinate inclusion and exclusion criteria. The dataset for this research will be eliminated if they: The inappropriateness of the qualitative methodology; using reviews or quantitative approach (x = 6), Not state the research method, theoretical framework, or study context (x = 35), the paper's result is not suitable to the main topic of investigation (x = 8), Not provide an adequate description of the research question (x = 9), Not demonstrate clear the role of the researcher; Not use purposefully collected data (x = 3). As a result, there are 8 studies (Table 4) that matched all the inclusion criteria. They were eventually added to the meta-synthesis after reading all the papers in full. And qualified studies information is in the following detailed table 5 below.

Case study Nº & Authorship - Year	Publication	Title
1. Peter et al. (2020)	Journal of Strategy and Management	Strategic action fields of digital transformation: An exploration of the strategic action fields of Swiss SMEs and large enterprises
2. Wang et al. (2020)	International Journal of Conflict Management	The effect of digital transformation strategy on performance: The moderating role of cognitive conflict
3. Fachrunnisa et al. (2020)	Journal of Small Business Strategy	Towards SMEs' digital transformation: The role of agile leadership and strategic flexibility

4. Mahmood et al. (2019)	Abasyn Journal of Social Sciences	Digital organizational transformation issues, challenges, and impact: A systematic literature review of a decade
5. Ziadlou, D. (2021)	Leadership in Health Services	Strategies during digital transformation to make progress in the achievement of sustainable development by 2030
6. Brunetti et al. (2020)	The TQM Journal	Digital transformation challenges: strategies emerging from a multi-stakeholder approach
7. Setzke et al. (2021)	Information Systems Frontiers	Pathways to Digital Service Innovation: The Role of Digital Transformation Strategies in Established Organizations
8. Dehnert, M. (2020)	Business Research volume	Sustaining the current or pursuing the new: incumbent digital transformation strategies in the financial service industry

Table 5. Qualified studies information

3.2.4 Extracting and coding

The next step in the meta-synthesis method is to extract, code, and purify data from the qualified studies. According to Hoon's (2013) coding procedure protocol, the studies need to read the full text of each study in order to address the research question about managerial cognition in dynamic capability development. The selected studies will be coded between study characteristics and the findings of the primary studies. Compared to the raw data from the primary and in-depth case studies, the subsequent insights created by the author across these studies comprise the "data" of a meta-synthesis.

Firstly, creating a coding form based on the question of interest, the research objectives, theoretical background, data collection methods, etc. to collect the data needed for the meta-synthesis method demonstrated in Table 6. Next, build a group of goal definitions from where items to code with the field of dynamic capability research then look through selected studies to classify important information formed by research phenomenon and then fill it up into the coding form. In addition, refining and modifying the coding form if it is necessary. Open-ended questions also need to add to the coding form to guarantee that the needed information could be documented exactly as the original researcher described them. This information also needs to collect as much of the original data as feasible.

Group	Item No.	Code	Code Details
General details of the study	*1*	*Author(s)*	
	2	*Title*	
	3	*Journal*	
	4	*Published year*	
What are the authors trying to achieve (Focus of the research)	*5*	*The general aim of the research*	
	6	*Study objective*	
	7	*Research question(s)*	
Theoretical framing	*8*	*What is the concept of Digital transformation considered in the study?*	
	9	*What is the concept of value considered in the study?*	
	10	*How is the relationship between digital transformation strategy and value treated?*	
Setting/context in which the study is conducted	*11*	*Country*	
	12	*Sector / Industry*	
	13	*Research context*	
Methodology	*14*	*Type of case study*	
	15	*The number of cases analyzed*	
	16	*Level/unity of analysis*	

	17	Sampling design	
Data collection techniques data and sources	18	Time and sequence of the data collection	
	19	Techniques used by the researcher(s)	
	20	Data Sources	
	21	Amount of data collected	
Data analysis	22	Data analysis approach	
Key findings and insights	23	Key findings as summarized by the researcher(s) in the abstract/ introduction and conclusion section	
	24	Events, factors, or patterns pointed out by the researcher	
	25	Effects of the digital transformation & management strategy on the concept of value	
	26	Environmental conditions	
	27	Visualization of the conceptual model or framework provided by the researcher(s)	
Discussion	28	Discussion of key findings	
	29	Contributions to the field of digital transformation & management strategy	
	30	Contributions to the field of value	
	31	Limitations pointed out by the original researcher(s)	
	32	Limitations of the study (e.g., Methodology)	
Overall assessments	33	How relevant is this study to the underlying question?	
	34	How reliable/convincing is the study?	
	35	Missing information / logical inconsistencies?	
	36	Further comments	

Table 6. The coding form with its 36 heading items (Hoon, 2013)

Next, after accomplishing the selection and evaluation stage, by dissecting the text into manageable and meaningful text segments. Then translate the original studies into coded ones, synthesize the translation and express the synthesis as a process of research synthesis. The selected publications were tabulated (Table 7) with some main headings regarding Country, Sector/Industry, Techniques used by the researcher(s), and Amount of data collected. Furthermore, this codification enables viewers to retrace specific tracks of

the meta-synthesis process while also critically evaluating the process and its accompanying result. This is a feature often regarded as one of the primary benefits of research synthesis. Therefore, if a meta-synthesis protocol is provided, the literature search and inclusion/exclusion criteria are transparently reported, and the coding and analysis methods are detailed, both the validity of the results and the reliability of the meta-synthesis study can be assured (Hoon, 2013).

Case study no & Authorship - Year	Country	Sector/Industry	Techniques used by the researcher(s)	Amount of data collected
1. Peter et al. (2020)	*Switzerland*	*Swiss SMEs and large enterprises*	*The online survey was distributed via an e-mail invitation*	*2,590 participating managers and employees from 1,854 organizations.*
2. Wang et al. (2020)	*China*	*Traditional enterprises, high-tech industries and knowledge-intensive services (KIBS), the enterprises studied, private enterprises and state-owned enterprises, foreign enterprises, and others*	*Standard questionnaires to collect data for this research*	*156 valid questionnaires*
3. Fachrunnisa et al. (2020)	*Indonesia and Malaysia*	*Fashion, retailer, service, food and beverages, handcraft*	*The questionnaires to the owner/ leader/ manager*	*519 usable surveys*

4. Mahmood et al. (2019)	Many countries	Diversified sectors	Systematic literature review	55 papers (including journal articles, desecrations, and conference papers)
5. Ziadlou, D. (2021)	USA	The health-care industry	Semi-structured interviews	10 US C-Suits hospital participants
6. Brunetti et al. (2020)	Austria & Italy	The education industry	Face-to-face semi-structured in-depth interviews	100 stakeholders
7. Setzke et al. (2021)	Not defined by the authors - analyzed organizations acting upon Europe in general	Entertainment, Consumer goods, Sports, Manufacturing, Industrial manufacturing, IT services, Information security, Logistics, Consumer goods manufacturing	Semi-structured interviews	17 case studies with 130 interviewees (C-level executives, project managers, business unit leaders)

8. Dehnert, M. (2020)	Europe, the US, Asia, Africa, and Australia	Banks and Insurance companies	Dataset comes from a diverse set of incumbent FSPs, along with telephone interviews and a management survey with DT executives	59 banks and 24 insurance companies

Table 7. Coded studies in detail

3.2.5 Analyzing a case-specific level

In the next step, keep following Hoon's (2013)protocol instructions based on the extant literature. The collected data were analyzed and assessed carefully. They were mainly focused on two critical groups "Key findings and insights" and "Discussion" that statistically influence managerial cognition's ability to develop dynamic capabilities in each case.

In doing so, the data were developed to a more theoretical level and not only advance the level of analysis from a case-specific but also appropriate for addressing the research questions and main goals through the meta-synthesis process of analyzing the 8 original research articles. The causal network was created based on the coding of each study, which was done using the coding form from the previous section. Thus, the causal networks were exploited along with a set of theoretical categories in this section served as the base for mapping cautiously each case in case-specific causal networks.

From that, they were identified through the logical process of interaction developed by the collected studies when analyzing between value and digital transformation & management strategy. The causal networks' categories were extracted by using the coding approach outlined in the extracting and coding section. As a consequence, each of the eight case-specific causal networks was formed relevant and meaningful across all circumstances (Table 8.).

Case-Specific	Extracted Variables
CASE STUDY 1	- External perspective: - Customer Centricity -Internal perspective: - Digital Leadership and Culture - Process Engineering - Internal and External perspectives: - Digital Business Development - Digital Marketing - New Technologies - Cloud and Data
CASE STUDY 2	- Fusion between the information technology/information system (IT/IS) strategy and business strategy. - The development and use of digital technologies - Top managers
CASE STUDY 3	- Agile leadership - Strategy flexibility - Workforce transformation - Dynamic capability
CASE STUDY 4	- Strategy for Technological Disruption - Strategic Alignment/ Integration

	- Strategy for People's role, Responsibilities, & org. Structure
	- Knowledge management strategies
CASE STUDY 5	*- Knowledge development*
	- Innovation development
	- Motivation
	- Alignment of local and global strategies
	- Leadership support
	- Partnership
	- Mindset change
	- Vision creation
CASE STUDY 6	*- Develop digital culture and skills*
	- Create infrastructures and technologies
	- Invest in digital ecosystems
CASE STUDY 7	*- Structural separation (Spin-off)*
	- Strategic partnerships
	- Centralization of decision making
	- Strategic outsourcing
CASE STUDY 8	*- Facade digitalization*
	- Holistic digital configurations

Table 8. Case-specific causal network variables

The case-specific variables were formulated by synthesizing the findings from the analysis across a set of studies related to logical process accounting 'digital transformation & management strategy' research. They will be emerged and be explained in detail in the next phase.

3.2.6 Synthesizing on an across-study level

According to Hoon (2013), the purpose of this step is to convert from a case-specific level to a cross-study level analysis by merging the strings of variables determined in the eight case-specific causal networks into a cross-study network. This step simultaneously helps to discover deeper how the ongoing synthesis studies are relevant or discordant via a comparison and contrast exercise.

As such, the author matched each case-specific causal network to explore how case-specific variables performed the connection across the entire set of cases. By analyzing the causal networks, according to clear linkages between the research goal and meaning of variables in case studies. The author purified and examined the main variables that affect others logically, which variables are equivalent, replaceable, and support each other, and which variables need to happen first to facilitate others happening later. As a result, a pictorial view of an across-study network synthesis is depicted in Table 9, and it was generated by combining a pattern of variable strings that was discovered. It also created a coherent picture of the connection between variables and relationships found in each case.

Action Field	Main variables	Equivalent variables
Strategy	*Invest in digital ecosystems*	*- Partnership* *- Strategic partnerships* *- Holistic digital configuration*
	Strategic outsourcing	
	Strategic Alignment/ Integration	*- Alignment of local and global strategies*

		- Fusion between (IT/IS) strategy and business strategy
	Digital Marketing	
Technology	Strategy for Technological Disruption	- New Technologies
		- The development and use of digital technologies
		- Create infrastructures and technologies
Organization	Structural separation (Spin-off)	
	Strategy flexibility	
	Innovation development	- Process Engineering
		- Dynamic capability
	Strategy for People's role, Responsibilities, & org. Structure	- Digital Business Development
Culture	Agile leadership	- Leadership support
	Top managers	- Centralization of decision making
	Digital Leadership and Culture	
Customer	Customer Centricity	- Facade digitalization
People/ Employees	Develop digital culture and skills	- Cloud and Data
		- Workforce transformation
		- Knowledge management strategies
		- Knowledge development
		- Motivation

- Mindset change

- Vision creation

Table 9. Variables of the across-study network synthesis

According to the outcomes of variables analysis and interpretation. Due to facilitating information processing and connecting variables across the entire set of cases at a cross-study level to arrive at a general pattern among these variables. As a result, the author created the across-study network synthesis with 14 main variables and equivalent variables. This is also the final result of the meta-synthesis method used in this research.

4   Findings

The purpose of this chapter is to explore a matching analysis. It is an approach to facilitate the comparison of similarities, differences, contextual factors, outcomes, etc. The key issues in the theoretical framework are present in the found variables in across-study network synthesis, and they were conducted in the meta-synthesis method. And the critical goal is to pave the way for a comprehensive framework based on practical case studies that would be successfully applied in digital transformation operations in constant change.

4.1   The Criteria Analysis

The author conducted a particular comparative analysis between the theoretical framework and the across-study network synthesis by using case studies regarding determined criteria of digital transformation and management strategy from various organizations, as the previous chapter explained how the case studies and criteria were chosen.

Even though there are many endemic differences in the case literature and this leads analysis to a daunting task. The criteria evaluated for this research were purposefully maintained relatively diversified in terms of industry and scale of the organization to guarantee that the final framework is generalizable for all sorts of organizations. Through this expansive analysis, it will discover the main factors determining the implementation success of management strategies related to digital transformation.

4.2   Similarities, differences, and contextual factors

Strategy

In the strategy factor, the three issues of Digital transformation strategy, Availability of sufficient financial resources, and Strategic foresight which are similar to Investing in digital ecosystems are mentioned in the studies (Ziadlou, 2021) (Setzke, et al., 2021) (Dehnert, 2020). They are performed in the medium-to-long-term vision of ecosystems pillar (Brunetti, et al., 2020), the environmental condition, and the plurality of interested stakeholders faced by organizations which are multi-level place-based actions to assure

the success of the digital transformation strategies in an innovation system. Besides, the strategic and policy actions and by managing financial resources to encourage the digital transformation processes that is the creation of new occasions of cooperation among stakeholders. A strategic foresight to maintain the macro-region competitiveness and its stakeholders provide an accelerating boost to the success of innovation processes.

The IT Governance issue is equivalent to the variable of Strategic Alignment/ Integration (Mahmood, et al., 2019). This is explained in literature and also appropriate to the meaning of the theoretical framework, digital transformation does not ground by a unique strategy, thus the alignment of IT strategy, IS strategy, changes management strategy, and business Strategies is crucial for the successful digital transformation strategy (Korachi & Bounabat, 2020) (Wang, et al., 2020) (Ziadlou, 2021).

Strategic outsourcing does not appear in the theoretical framework, and it is also a new aspect of digital transformation strategy and will be analyzed clearly in the next session.

Technology

The research meaning, in the New Technologies action field in Strategy for Technological Disruption (Mahmood, et al., 2019) is comprehensive three matters in the theoretical framework, Exploitation of new technologies, An obvious strategy/ technological roadmap, Digitization of core IT system(s) (Peter, et al., 2020) (Wang, et al., 2020) (Brunetti, et al., 2020). It was also explained distinctly in the studies about the significant role of digital improvements. Understanding and embracing the potential of digital technology, and transforming the companies in the process of integrating digital technologies to highlight the effective management strategy. As the result, the potential of the latest technologies can be exploited successfully and sustainably.

A coherent data strategy about IT security in the framework is totally different in Digital Marketing in the variables table. These management strategies are also important in the digital transformation process and they will be analyzed further in the next part.

Organization

The digitally agile issue is present in the variable of Strategy flexibility which was clarified in the study (Fachrunnisa, et al., 2020), including the workforce transformation and the dynamic capability in culture and working practice (Perkin & Abraham, 2017). Strategy

flexibility is related to the determining strategy in the development of digital transformation in SMEs and the responsibility of the leader in the business environment.

Similarly, Business model reinvention in the theoretical framework was also analyzed in two variables of Innovation Development and Strategy for People's role, Responsibilities, & org. Structure, even so, fundamental and comprehensive change in the digital transformation which is the reinvention of how a company operates with resources, priorities, and processes (Perkin & Abraham, 2017) and it is also discussed in the literature (Peter, et al., 2020) (Fachrunnisa, et al., 2020). The management strategies for innovation development claim in technological change and management practice, organization culture (Ziadlou, 2021) (Mahmood, et al., 2019).

The variable of Structural separation (Spin-off) is a new element in management strategy in the digital transformation model in the qualified studies (Setzke, et al., 2021). It will be argued in the next section.

Culture

In the theoretical issue like Freedom to experiment with new ideas as linked to Agile leadership study (Fachrunnisa, et al., 2020) which confirms that for complicated and unconventional decision-making, cognitive conflict can encourage creative ideas and affect the quality of management strategy as well as improvement of organizational performance.

In addition, Strong commitment and engagement from management in the theoretical framework are plainly referred to in the strategy of Top managers as well. The C-level executives are mostly responsible for integrating and exploiting digital technologies to implement digital transformation via management strategies successfully (Wang, et al., 2020).

The issue of digital leaders in the theoretical framework is also related to Digital Leadership and Culture in the variables of the across-study network synthesis table. Thus Digital Leaders with change management and the implementation of new leadership methods must be ready for new technologies and new working arrangements in the digital transformation process (Peter, et al., 2020).

Customer

The studies' outcome with Customer Centricity is the same as the theoretical framework issue (Peter, et al., 2020) and the dimension of Hybrid client interaction channels (Review, 2021) which identified as a type of digital strategy with high maturity in customer interaction. It is implemented by improving the positive experience of customers through the customer orientation strategy and personalizing products and services by analyzing customer data (Dehnert, 2020).

People/ Employees

In the strategy meaning, the three issues of Education and development of new skills, Cultural and behavioral, and Talent Strategy are equal to the pillar of the strategy of the Develop digital culture and skills in the study (Brunetti, et al., 2020) which refers comprehensively all the matters of People/ Employee in the theoretical framework. The development of the digital transformation strategy is involved training and knowledge sharing and the possibility of undertaking a plan of mutual collaboration among talents and businesses (Fachrunnisa, et al., 2020). Mindset change, additionally, is one of the important factors for cultural and behavioral development (Ziadlou, 2021). Besides that, digital strategic actions to retain and attract talents related to people with top digital abilities and skills is an indispensable factor in the success of innovation processes (Peter, et al., 2020).

4.3 Result

There is always a similar trajectory with all successful digital transformation journeys by building the framework based on the key learnings. After having been assessed and refined, the result abstracted the differences and similarities between the issues in the theoretical framework and variables in the across-study network synthesis. As a consequence, the comprehensive framework with 15 main factors for management strategies in the digital transformation process was established (see Table. 10) and this also derived a valuable and qualified answer to the first research question which is the digital transformation strategies in the organization. The detail of these findings will be described in the following sections.

Action Field	Main Factors
Strategy	Invest in digital ecosystems
	Strategic outsourcing
	Strategic Alignment/ Integration
Technology	Strategy for Technological Disruption
	A coherent data strategy
	Digital Marketing
Organization	Structural separation (Spin-off)
	Strategy flexibility
	Innovation development
	Strategy for People's role, Responsibilities, & org. Structure
Culture	Agile leadership
	Top managers
	Digital Leadership and Culture
Customer	Customer Centricity
People/ Employees	Develop digital culture and skills

Table 10. The digital transformation strategies framework

4.4 An Overview of Strategies

In the Strategy action field, there are three strategies comprise:

Invest in Digital Ecosystems which emphasizes the significance of investing in medium to long-term sight, partnerships, and life quality. The relationship between technologies and the people who utilize them shapes the digital transformation in organizations while the

dynamic and continuous changes come from the behavior of the relevant digital ecosystems. Partnership-based strategies are required for the implementation of digital-based business models and the stimulation of co-creation processes. (Brunetti, et al., 2020) (Ziadlou, 2021) (Setzke, et al., 2021) (Dehnert, 2020)

Strategic Alignment/ Integration, *this strategy illustrates the interaction and fusion in the middle of the organization's IT/IS strategy and business strategy and it can broaden further with the association of various strategies in business management. The fusion and combination between business and digital business strategy have been proposed in numerous organizations, thus the alignment of such initiatives is critical for a successful digital transformation. (Wang, et al., 2020) (Mahmood, et al., 2019) (Ziadlou, 2021)*

Strategic outsourcing, *strategic outsourcing via alliances and partnerships to get the essential innovative capabilities, and this play a crucial role in building strategic partnerships, higher dynamic adjustability, organization's asset scalability and competencies. Such as, organizations can establish training programs for their chosen workforce or hire employees from outside to guide the required capabilities into the organization (Setzke, et al., 2021).*

In the Technology action field, there are also three strategies, the Strategy for Technological Disruption, A coherent data strategy, Digital Marketing

Strategy for Technological Disruption, *technological disruption is the appearance of new technologies which replace current technologies, rendering them obsolete. The Strategy for Technological Disruption mainly focuses on applying technological improvements to arouse the needs of digital transformation, changes in product and service, business model, organizational structure, and processes, and it necessitates obvious management strategy to successfully address such interruption (Peter, et al., 2020) (Wang, et al., 2020) (Mahmood, et al., 2019) (Brunetti, et al., 2020).*

A coherent data strategy, *with the guarantee of data security, and privacy for governing digital transformation. As digital service enables service firms to establish a platform for improved interactions with clients, as well as enhance data gathering, storage, analysis, and usage simultaneously safeguard information, and deter and mitigate cyber-attacks (Rha & Lee, 2022) (OECD, 2021).*

Digital Marketing can be seen as an integrated marketing strategy, and coordination of digital and analog channels, including online platforms, e-commerce, communication channels, marketing automation, and video marketing. Using digital platforms, tools, and channels to measure marketing and sales activities, the availability and analysis of customer, product, and sales data creates a system that facilitates the continuous monitoring and optimization of market activities (Peter, et al., 2020).

In the Organization action field, there are four strategies comprise:

Strategic flexibility originates from workforce transformation and dynamic capability to behave with uncertainty by modifying its goals with the assistance of knowledge and exceptional abilities. Due to the capacity to make choice possibilities and other types of strategic flexibility, they can provide the organization with a distinct competitive edge and handle dynamic and changing environments (Fachrunnisa, et al., 2020).

Innovation development strategy is explained by Peter, et al., (2020), Fachrunnisa, et al., (2020), and Ziadlou (2021) created through designing or (re)engineering carefully between the integration of the internal or external processes with business and technologies resulting in the automation and the digitization of workflows. This strategy is built based on technology development, and in terms of managerial practice and organizational culture

Strategy for People's role, Responsibilities, & org. Structure (Mahmood, et al., 2019) based on emerging new technologies, and digital platforms leading to raising customer value and change in organization structure and identities (Peter, et al., 2020). To achieve shared understanding, it is imperative to adopt a clear digital strategy. Organizations prioritize new business ideas, market positioning, and innovative business ideas along with the benefits of new technologies.

In the Culture action field, there are three types of strategies, Agile leadership, Top managers, Digital Leadership and Culture

Agile leadership can be defined as a leadership manner that can respond quickly to business chances and challenges arising from developments and advancements in information technology. It comprises share responsibility, being good at spotting issues

and making choices, and having an adaptable system and a flexible framework (Fachrunnisa, et al., 2020) (Ziadlou, 2021).

Top managers *of the organization have to be skilled at coordinating conflict and maintaining cognitive conflict at a tolerable scale and magnitude. They also need to play the main role in conflict management and foster an organizational culture where the managers encourage creativity, allow failure, and enable employees to express their own thoughts (Wang, et al., 2020) (Setzke, et al., 2021).*

Digital Leadership and Culture *highlight the adoption of modern management ideas, specifically change management and the application of new leadership styles, the digital and portable workplace, and new collaborative organizational forms as well as reactive, proactive management. This strategy also expects the organization's employees must be ready for adapting to new technologies and reorganizing work. (Peter, et al., 2020).*

In Customer action field has Customer Centricity strategy,

Customer Centricity *is featured by increasing customer experience through ongoing customer orientation, a cheerful customer experience, and personalized products and services, determined from the external view. Companies will engage in consumer data analysis and optimize their demands appropriately, and at the same time communicating and interacting with customers also play a crucial point (Peter, et al., 2020).*

And finally in the People/ Employees action field has the Develop digital culture and skills strategy

The Develop digital culture and skills *might be conducted in order to successfully tackle the difficulties of digital transformation by taking into account continuing dynamics through increasing digital culture and skills, building infrastructures and technologies, and investing in digital ecosystems. The strategy also points out that a significant investment in people to give them the necessary knowledge and abilities to engage with new technologies in more complicated contexts progressively (Peter, et al., 2020) (Fachrunnisa, et al., 2020) (Ziadlou, 2021) (Mahmood, et al., 2019) (Ziadlou, 2021) (Brunetti, et al., 2020).*

This result defines and categorizes each action field strategy namely, technology, organization, culture, customer, and people/employees and main factors respectively.

They all divulge how distinct significant strategies can support organizations on their digital transformation management journey. In order to determine the relevant content of each action field, the main factors as well as digital transformation strategies will be considered in the next section.

5 Discuss

In the following chapter, the discussion of the found results is presented and leads to a motivation to answer the stated research question: How to take advantage of digital transformation strategies successfully? In other words, the author discusses this chapter the main factors in the digital transformation strategies framework above in order to help companies aware, and employ their management strategies for digital transformation feasibly and effectively in the ever-changing world.

5.1 Discussing the result

The expected outcome of this research is a framework for digital transformation strategies and to acquire an understanding of how organizations can manage to achieve successful digital transformation. According to Philippart (2022), Digital Transformation is fundamental changes related to multiple dimensions, factors including the pace of digital innovation, economic sustainability, competitive advantage, market share, and technological breakthrough. It also added complex layers of constant change, requiring swiftness and agility in management strategies. Top management, thus, noticed these changes developing in the external environment and inside the organization, then it is critical to apply or combine the found framework into the strategy-making process depending on an organization's short, medium, and long-term vision and goal.

From the managerial perspective, this can be seen as a generalizable and applicable strategies framework for several types of institutions and this framework also can become effective support to entrepreneurs, executive leadership and the board of directors, and those in transformation-specific roles as a chief digital officer (CDO), chief information officer (CIO), consultants and researchers to obtain an accomplished understanding about management strategies of undertaking digital transformation. Besides, these strategies must be regularly rechecked, evaluated, and adjusted for appropriate reality situations and the general strategic management of organizations.

Furthermore, Bumann and Peter (2019) also clarify that several current strategy frameworks and models are quite generic and much like a common business strategy or business model canvas whilst others embrace digital transformation-determined action fields. These are the contributions to formerly addressed subjects in digital transformation

strategy creation and execution. Thus, the enterprises need to make a decision as to whether they want to reconsider their strategy entirely (which leads to applying the generic models) or whether they want to consolidate and/or upgrade their existing strategy based on compounding the new management strategies and digital subjects.

Also, according to Zaoui and Souissi (2020), the specialization of strategies entails defining obvious navigation for the organizations' sustainable growth which sometimes raises the danger of favoring one action field over others. So they should adopt a multidimensional/ecosystemic approach to strategic management, especially in the present climate of rising competitiveness.

5.2 Reviewing Strategies for Transformation

In this section, the author clearly presents the argumentation of the main factors altogether in the digital transformation strategies framework following the action field which was discovered by Bumann and Peter (2019) and divides them into three groups comprise Strategy and Organization, Culture and People/ Employees, Technology and Customer. In order to formulate the deep comprehensibleness of management strategies for adopting them into digital transformation improvement successfully.

5.2.1 Strategy and Organization

In the economy of unremitting change, the most crucial problem that enterprises often encounter throughout the digital transformation process is developing an effective management strategy (Mahmood, et al., 2019). Because the deficiency of an effective management strategy that covers transformation holistically is largely to blame for the complication of digital transformation projects. The organization managers must formulate and implement effective strategies including the impacts of digital transformation and improve superior operational performance. These aim to solve the challenges of digital transformation and the requirement to remain competitive in their sectors (Hess et al, 2016). From that, digital transformation provides a lot of chances for organizations to enhance customer service, implement internal process optimization, as well as renew their management strategy for a more sustainable future.

At first, the most effective and important strategy is Invest in Digital Ecosystems which emphasizes the significance of investing in medium to long-term sight, partnerships, and

life quality (Brunetti, et al., 2020). Because according to Dehnert (2020), holistic digital configurations are built by establishing strategic technological partnerships (e.g. platform ecosystems) (Setzke, et al., 2021) (Ziadlou, 2021), adopting advanced digital technologies, constituting digital strategy-making by the side of elevated maturity between the models of customer interaction, value creation, value proposition. In addition, digital transformation also emphasizes the significance of ecosystemic thinking and management strategy, particularly in the context of service enhancement (Setzke, et al., 2021). Once integrating with Strategy for People's role, Responsibilities, & org. Structure (Mahmood, et al., 2019) based on emerging technologies leading to change in organization structure and identities (Peter, et al., 2020). As the result, the organizations' new business models thus must be open, dynamic, ecosystem-centric structures along with accounting for today's demands and specifications while driving business model reinvention to become a continuous and comprehensive digital transformation process (Aagaard, 2019).

Then keep debating about the strategic cooperation trend is one of the successful strategies that many companies are exploiting. With the same opinion about Strategic Alignment/ Integration, Wang, et al. (2020) and Mahmood, et al. (2019) indicate that the interaction and fusion in the middle of the organization's IT/IS strategy and business strategy under significantly influenced by digital technologies will cause the change of the organizational business model, structure and processes totally. And this links to Innovation Development (Ziadlou, 2021), created through the careful integration of the internal or external design processes with business and technologies eliciting better adoption and market leadership. Additionally, Hess et al. (2016) also explain more about the progression of a digital transformation strategy that necessitates a combination of top-down and bottom-up strategizing. There is no isolated and concentrated strategy for addressing implicitly all key challenges in the stated chapter above; rather, digital transformation necessitates the development of a combination set of strategic initiatives (Brunetti, et al., 2020). Kraus et al. (2021) assume that the multiple strategies combined with the digital transformation strategy and the other operating strategies exploited by a large of companies can help them to achieve new capabilities, resources, competitive advantage, and reputation.

Successful digital transformation is obtained by leveraging and discovering at the same time what it provides to reach organizational agility (Kraus S., et al., 2021) along with the leader agility followed by Strategic flexibility is clarified by Fachrunnisa, et al. (2020) as well. Moreover, they expound Strategic flexibility is highly reliant on successful innovation and business model conversion. Because of decision-making ability and diverse strategic flexibility forms help the strategic flexibility of the companies to achieve a special competitive advantage and handle dynamic and changing environments (Fachrunnisa, et al., 2020). Hence, Structural separation (Spin-off), Strategic outsourcing will be taken into account depending on the context of the organizations. By Structural separation strategy, Setzke, et al., (2021) explain that the organizations can separate their innovation activities from the core business into one or more spin-off organizations but might still mainly be managed in digital transformation operation by the main organization. Furthermore, the wise option for strategic outsourcing getting better quality work from outsourced specialists in digital, creative, and tech (Herbert, 2017) due to partnerships being very popular for implementing digital transformation strategies. If large organizations possess plentiful resources, it will be a feasible strategy and smaller or medium-sized ones will tend to the objective to establish a healthy ecosystem of partners who can help them to fill up their digital transformation gaps (Setzke, et al., 2021).

After all, in the tough competition of today's business world, to remain appropriate to fluctuate digital economies, business models must be built, implemented, and transformed strategically (Teece, 2018). Hence, if the organizations evolve the appropriate and innovative business models, they can transform their businesses, generate novel markets, and unbolt essential development successfully (Ustundag & Cevikcan, 2018, p. 26). Besides, a business model is supposed a critical component that connects strategy and processes, business planning, partnerships, and advanced digital technologies, as well as the corporate's innovative resources and competitive advantage (BORCAN, 2021). From there on, the organizations are possessing diversified choices of digital transformation strategies to apply to their business based on the context of the company. These strategies simultaneously will be revised and reworked along with novel insights and learnings from current implementation activities so that they may lead them to the desired outcome (Chanias, et al., 2019).

5.2.2 Culture and People/ Employees

To derive digital transformation strategy configurations, Ziadlou (2021) finds that all aspects influencing success in the innovation process are human-related, and a sufficient culture is key for strategy implementation (BORCAN, 2021). Concurrently, the strategy of the Develop digital culture and skills highlights the magnitude of establishing the digital culture and employee skills before deciding to invest in digital infrastructures and technologies during the digital transformation process (Brunetti, et al., 2020). Apart from that, Fachrunnisa, et al. (2020) claim that dynamic capabilities in organizational culture will be developed by empowering employees with dynamic abilities so that they can comprehend and capture value in the context of digital innovation nowadays.

More specifically, education and training are important factors in the change of digital transformation (Kraus, et al., 2022). Therefore, also according to this strategy the transformation training program will help organizations achieve the engagement and empowerment of human resources, culture, and knowledge development which are also the success factors in digital transformation cultivation (Ziadlou, 2021). Furthermore, due to the demand and supply in labor markets matter, the majority of successful businesses have been embracing progressively aggressive techniques for attracting crucial high-skilled talent (Ziadlou, 2021). However, this will be a big challenge for firms in unappealing positions and industries, or simply lesser-known brands when they try to find high-quality new talent in-house (Herbert, 2017).

And Digital Leadership and Culture strategy are also interpreted clearly that the adaptation of digital disruption management based on new leadership methods (Peter, et al., 2020). This strategy notice that if the companies transform digitally and launch new types of digital work as employees desire so they must be ready for adapting to new technologies and novel working arrangements. Plus, leaders of the organization must accept and infuse work culture with the support of digital technology that will progress to a successful transformation (Ziadlou, 2021).

Besides, in Agile Leadership strategy emphasizes, agile leaders need to have initiative and awareness of the enhancement of digital transformation in their business context (Fachrunnisa, et al., 2020) and this also mainly depends on how organization leaders infuse and boost collaboration, agility (Ziadlou, 2021). Especially, this collaboration will help organizations to prevent internal resistance to the innovation process as well as build

an agile mentality and working culture effectively (Setzke, et al., 2021). Finally, in the strategy of The top managers, business top management must be skilled at coordinating conflict, as well as maintaining cognitive conflict at a tolerable scope and magnitude (Wang, et al., 2020). Because of digital transformation, both leadership and responsibilities, and the competencies of employees are changed (Vital, 2019). Transformational leadership is the most effective way to encourage knowledge sharing, organizational learning, and innovative behavior from top-rank employees (Peter, et al., 2020). Hence, leadership in the digital transformation era plays a particularly significant factor in strategic management (Peter, et al., 2020).

5.2.3   Technology and Customer

In the ceaseless change of nowadays, the economic and social crisis created by the COVID-19 pandemic and physical distancing measures prompted many to discuss these changes embarking on a work-life transformation, as preference has been given to online channels, remote work, or hybrid model in an attempt to maintain a stable level of activity (Gratton, 2021). Besides that, the pandemic scenario has emphasized the benefits of adopting digital technology in various economic and social arenas, but it also demonstrates that these benefits are not available to everyone reach due to the diverse dimensions of the ability to approach and usage of these digital technologies. However, to keep going forward in the recovery, digital technology should be radically exploited to create a new future through economic development, creating employment, inequality reduction, and increased sustainability.

From the business perspective, the utilization of digital technologies and digitalization in innovation is a significant change for digital business model innovation (Aagaard, 2019). The Strategy for Technological Disruption may be considered a key strategy that necessitates the leaders must prepare the corrective strategies to successfully address such disruption (Mahmood, et al., 2019). And indeed, the foundation of the digital economy aims to build the connected relationships between humans and machines based on essential prerequisites are culture, knowledge, and skills in organizations and systematically involve all stakeholders (Brunetti, et al., 2020). According to Peter, et al. (2020), the importance of technology varies by sector so the transformation strategy will be mainly based on employees' ability to realize its full potential by training them on the prospects of new technology solutions and how to exploit them successfully and

sustainably. This strategy must be adopted by all employee generations, including both young people's digital literacy and adult employee training (Brunetti, et al., 2020).

In addition, the most difficult task nowadays is converting massive amounts of data into useful knowledge is also placed towards (Rogers, 2016). The implementation of these new technologies should link to both the Customer Centricity strategy and A coherent data strategy by investing in the analysis of customer data and optimizing properly their demands (Peter, et al., 2020). In fact, data is being generated at an unprecedented proportion, thus big data analytics can increase customer knowledge on the basis of new products and service offerings (Dehnert, 2020). However, access to big data should go along together with the improvement of cyber-resilience to safeguard user information and also deter and reduce cyber-attacks to keep the organization's information secure and avoid undeserving risk (OECD, 2021). Accordingly, Digital Marketing strategy asks for smart data and new insights through the availability and analysis of customer, product, and sales data along with digital platforms, tools, and channels to create a system that can help organizations monitor and optimize their business constantly (Peter, et al., 2020).

6 Conclusion

In the last chapter of this master's thesis, I will present my research's ultimate findings

In the digital economy age, digital transformation is generating a wave of explosion in the economy, financial sectors, and society in general. Digital strategy motivates digital maturity, and the strength of the digital transformation strategy depends on the company's vision and objective (Zaoui & Souissi, 2020). And in today's business world of unceasing change, competition has progressively become a dire battle of strategies rather than resources, and companies are gradually investing to ensure their dynamic capabilities and create key competencies. As a result of Digital transformations with technology, innovative potential in business models and processes, as well as formulating more comprehensive strategies are playing an increasingly significant role in making a business more sustainable and more effective in the long term. A competition's desire to win places new demands on the management who should set ambitious goals, but also make them the property of all employees, and collective responsibility. They also build the work culture and create a vision of the future of the organization and find non-trivial solutions to transforming the enterprise's activities digitally.

Regarding research summarization, incorporating the meta-synthesis approach developed by Hoon (2013) and provides clear inclusion and exclusion criteria, ensuring validity, and reliability. 81 sample articles were collected from the four databases after 6 research steps by classifying, purifying, extracting, coding, analyzing, and synthesizing, and the outcome covered the 8 in-depth case studies. Then the data from these cases were analyzed and synthesized at the case-specific and across-study level which led to the table of variables. These were used to compare and analyze the created theoretical framework. Finally, the eventual result is to formulate the digital transformation strategies framework and contribute with a set of 15 strategies in 6 action fields. In general, the contribution of this research suggests the management strategies that can be accomplished to successfully face the challenges of digital transformation by applying or associating those strategies with their business based on the context of the company. Moreover, these strategies foster digitalization by developing digital culture and skills, customer centricity, creating infrastructures and technologies, big data, and investing in digital ecosystems.

From the strategic perspective, there are many elements that enhance the relevance of digital transformation strategies can be seen as the increasing competitiveness, the change in culture, technology, and employee and consumer perception. With a view to giving managerial direction for digital transformation strategies, the organizations must improve their understanding of how corporations might obtain a sustainable competitive edge by using proper resources, which type of strategies they should apply to succeed, how to align the strategies with each other, how their business model or structure of the corporation must alter to enable these strategies. Numerous strategies of Digital Ecosystems are adopted successfully in establishing strategic technological partnerships because the new technologies develop solid and lasting collaborative partnerships between stakeholders. Importantly, this Digital Ecosystem's strategy also identifies and allocates better business risks, and cuts business costs effectively.

Because of the hidden risk of incessant change, just as the pandemic and economic crisis exacerbate the challenges of digital transformation. Thus, traditional companies should unify the strategy on the way beyond, apply the new performance ratios, and renovate supply chain partners, distributors, and partner networks to establish innovative business models more effectual and sustainable via exploiting the new digital technologies. And leading organizations can improve their communication with employees by understanding the barriers to constant change, as well as specify where to invest, which innovative initiatives are most possible, how to encourage knowledge sharing, what kind of training should be developed, how to attract and retain the talent, what incentives will be needed, etc.

Moreover, digital transformation in the company is an important and impactful event that every company wants to pursue, then it will become an integral part of any company's strategy. Hence, the leaders of the company at every level must obtain appropriate and in-depth knowledge of digital technologies in order to give the degree of assistance required to achieve a successful digital transformation. The leaders must be able to comprehend, authorize, approve and fund the resources required to support the digital transformation process. As Ziadlou (2021) supposes that there are existing discrepancies between being digital and thinking digital. It can be remarkable this study discerns how people view a major component of sustainability and its connection to digitalization as a

catalyst while taking into account that sustainable development is a global goal and future business tendency.

6.1 Managerial implication

Managerial implications are the management instruction for how managers and executives of the companies will succeed by the stated management strategies in digital transformation.

The findings of this study point to the strategies for promoting digitalization in a constantly innovative environment through the development of digital culture, knowledge, and skills. It is also the engagement of the leaders in reshaping their governance and culture to fulfill the transformation imperatives before investing progressively in the company's digital infrastructures and technologies. Because according to Väyrynen, Helander & Jalonen (2022), the deficiency of technological and financial resources to develop new digital improvements and skills for the company's employees, and the lack of leadership commitment to build new working and management methods in engaging the digital transformation process. They are the popular factors preventing the success of the digital transformation process.

There are three types of digital transformations, according to LaBerge, L., Smaje, K., and Zemmel R. (2022) mention, that companies need to strategically transform core businesses with digital technologies, establish new digital businesses, and upgrade the advanced technologies of core businesses to ensure competitiveness in the future. Thus, companies need to set up an environment of adaptive change for the development of teams with people who possess the necessary skills and mindsets and are simultaneously willing to assist with training and coaching another one to avoid process and cultural tensions. In addition, the agile leadership mindset with in-depth knowledge of digital technologies from the management will effectively support and manage the culture of collaboration and learning, as well as big data exploitation, customer centricity, and digital ecosystem development. In doing so, it requires the momentum of integrative strategies for execution, giving properly the managerial direction for digital transformation strategies along with experimenting, assessing, reorienting, and innovating constantly based on existing or past circumstances of the company.

We observe the same discrepancy when it comes to maintaining the benefits of digital transformation. The phrase "Thinking big, starting small, scaling fast" in the transformation process, organizational mindset, and working method is a description of the definitive strategy for agile transformation digitally (Perkin, 2020, p. 172-173). This also conveys the need to map a feasible course for change, laying the groundwork for core motivations that may support new operation models, processes, and structures. It apprehends additionally the requirement for learning culture, attention, dynamic, and quick progress. However, the agility of digital transformation also emphasizes the need for companies to be more flexible and adaptive in their management strategies. Companies must promote more interactional strategies, and shift mindsets in order to avoid becoming locked in conventional linear thinking.

6.2 Limitations and Recommendations for Further Research

By analyzing a variety of digital transformation strategies, the researcher emphasizes the importance of formulating a digital transformation strategy, despite not having fully investigated digital strategy formulation and the specific guidelines for digital strategy formulation are still unclear. These literature reviews were found in top-ranked impact factors journals regarding digital transformation. The author tried to obtain all data from the newest academic materials and search engines on highly rated information systems journals and peer-reviewed international conferences. With 8 in-depth case studies selected from 81 sample articles that were sifted carefully, it is a tolerable sample size appears following the application of inclusion and exclusion criteria from this remarkable area. So, this research could be more valuable and applicable if the author adds more articles, journals, conferences, scientific research papers, and practitioner-scientific outlets from various databases and fields to enhance the sample proportion and expand this review to diversified sectors. In addition, the current study might be expanded by including more relevant terms and keywords using a larger period as well as improving inclusion and exclusion criteria in the research method thus more detailed analyses could be performed.

The first recommendation for future research is to design quantitative research or a full meta-synthesis method procedure to invent new theories and determine the relationship between digital transformation strategies, which strategy the company is adopting, and

how successful or failure of applying strategies. The enhancement of a systematic empirical investigation would include groups of executive leadership, and senior management, especially CDOs, and CIOs via questionnaire surveys and statistical reports which provide a large picture of the existing situation of the company and assist the management in formulating digital transformation strategies more effectively and feasible. Furthermore, it might give a common vision that is useful for developing future-oriented companies and raising the company's future via the vision of its employees fosters a sense of ownership and drives them to attain the desired future.

The second recommendation is to try to employ the qualitative research methods as an applied action study, encouraging tend some companies that own the completed digital ecosystem with successful digital transformation experiences to generate reality-based training programs and derive the practical results of the digital transformation course. It will give simultaneously greater insights into the link between knowledge enhancement, human resource empowerment, and participation in the digital transformation process. Besides, researchers may create this type of program by formulating a comprehensive strategy to monitor the training activity and assemble feedback from attendance in order to provide constant improvements.

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