IMPACT OF DIGITAL TRANSFORMATION ON ORGANISATIONAL STRUCTURE

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ABSTRACT

Digital transformation has significantly changed organisations' operational functions and processes, further impacted organisational structures and improved operational efficiencies. However, many expected benefits are not yet fully embraced by employees, some even feel resistant. Therefore, this research examined New Zealand employees' perceptions of the impact of digital transformation on the structuring processes of their organisations and makes recommendations for effective transformation. A post-positivism research paradigm was adopted to guide the design of mixed methods approach to this research, which included a survey and semi-structured interviews. The targeted participants were employees working or having worked in at least one New Zealand organisation where they experienced digital transformation. Purposive and snowball sampling methods were used to recruit 65 survey participants, with follow-up interviews undertaken from agreeing participants. The participants were moderately satisfied with the improved productivity, product and service quality, and positive financial outcomes that digital transformation brought to them and their organisations. The comparison between the findings from the two data sets suggests that resources including technology, talent and equipment were the most critical factors for effective digital transformation DT. This research recommends that New Zealand organisations should focus on a six-factor model to achieve the drivers, goals, and benefits of digital transformation.

Keywords: Digital transformation, organisational structure, post-positivism, and productivity

INTRODUCTION

More than half New Zealand organisations would become 'digital' by 2020, and by 2023, digitalisation will be fully embedded in organisations and will no longer be regarded as a particular aspect of organisational change (Corner 2020). Digital transformation (DT) has changed the market with new organisational models and has also developed digitally enhanced products and services. Adopting new and innovative approaches necessitates digital transformation. Digital transformation is the process of fundamental transformation using digital tools (Gartner, 2020). It refers to improving or replacing existing resources through cultural and technological change. On a tangible level, organisations enact digital transformation by purchasing certain products or solutions.

Digital transformation is a multifaceted and complex process (Gartner, 2020). Many of the potential benefits of digitalisation are not yet fully realised by organisations. A potential reason for this is that organisations do not entirely understand the impact digital transformation might have on their organisational structure. The models of digital transformation and organisational structure have been studied extensively, each on its own aspect, in the literature. However, there is a lack of research on the effectiveness of digital transformation processes for improving organisational structures. Case studies have been conducted in Europe (Soltanifar et al., 2021; Stalmachova et al., 2021), the United Kingdom (Correani et al., 2020), Italy (Pirola et al., 2019), Malaysia (Withaneachi et al., 2019) and Australia (Troshani et al., 2018). However, there has not been extensive research in New Zealand although digital transformation is common here (Corner, 2020; Wrycza & Maślankowski, 2020).

This research aimed to investigate how New Zealand employees perceive the influences of DT on organisational structure and the critical factors for effective DT. This research intended to offer insights into structural design for managers, owners and primary stakeholders when planning DT in their organisations.

Based on the research aim, this research seeks to answer the following questions (RQ):

- RQ 1. What are the factors for evaluating the effectiveness of DT on organisation structures?
- RQ 2. How effective are DT processes on organisation structures in New Zealand organisations?

Research question 1 will be answered by a thorough Literature Review of the DT and organisational structure (OS) model published in the prior research for the identification of the factors for the effectiveness evaluation of DT.

Request question 2 will be answered by analysis of the primary data collected from a survey and semi-structured interviews (interviews). For a better understanding of the perceived effectiveness of DT by New Zealand employees, the challenges and benefits of adopting DT were also investigated.

LITERATURE REVIEW

This section comprehensively reviews and summarises published articles, research and other academic documents related to the research topic.

Digital Transformation

Before discussing any DT or OS model in depth, it is necessary to recognise the terms digitisation, digitalisation and DT. Digital transformation is a high-level conversion, in accordance with digitisation, that touches an organisation's core business. Digitisation is described as the process of switching from analogue information to digital information. Digitalisation, on the other hand, is considered the work processes of digital systems, like enterprise resource planning (ERP), customer relationship management (CRM) and supply chain management (SCM), which can influence the efficiency of teamwork and resource deployment, and generate valuable information for an organisation (Gartner, 2020).

Furthermore, several articles in the literature maintain that there are two types of DT. The first type is cumulative DT, which transforms physical operations into online digital operations step by step; for example, gradually converting from traditional paper to e-books. The other type of is called rapid DT (Atta & Talamo, 2020; Imran et al., 2021), in which, new digital technologies are rapidly applied to completely change an organisation's business operations, processes and organisational structure (Kretschmer & Khashabi, 2020). Furthermore, DT also includes the process of an organisation redefining business strategy, innovation, and governance mechanisms. This is done to develop a framework that guides an organisation in effectively implementing digital strategies and developing digital business models (Cennamo et al., 2020).

The popularisation of digital technology empowers organisations to optimise their scope and value frequently, reduce cross-industry barriers, develop products and services, and promote cooperation, connections, and exchanges in various industries (Remes et al., 2018). For example, Google, Huawei, and Apple have shown concern for the automotive industry's development of self-driving cars using digital technology (Correani et al., 2020).

In addition, DT has been applied to various sectors, such as accounting (Troshani et al., 2018) banking (Stalmachova et al., 2021), consulting (Gerth & Heim, 2021), construction (Arabshahi et al., 2021; Daniotti et al., 2020), education (Kooskora, 2021), electrical and industrial agricultural equipment manufacturing, and telecommunications (Correani et al., 2020).

In brief, DT is a process of fundamental transformation using digital instruments to improve or replace current resources through technological change. It refers to the specific solutions and impacts of technical resources within and across different industries (Talamo & Bonanomi, 2020).

Organisational Structure

The OS is a system that outlines how certain activities are directed to achieve an organisation's goals. It can also be understood as the looking glass or perspective (Kidschun et al., 2019) that allows individuals to see an organisation and its environment.

For example, an organisation applied a rapid DT in finance. They used the quick application of technologies such as Cloud computing, Artificial Intelligence (AI), the Internet of Things (IoT), and Big Data to improve business operations. Nevertheless, if an employee cannot adopt the new system smoothly, the organisation will take it step by step. Agile organisations, however, will move from being hierarchical to holistic to fulfil the need for agility. This allows the organisation to adapt quickly to emerging opportunities and to acquire potential profits resulting from the extreme changes brought on by DT (Schwer & Hitz, 2018). In other words, many organisations' internal operations and processes, due to the widespread implementation and adoption of DT, have triggered large-scale transformations.

Kretschmer & Khashabi (2020) confirmed that an organisation must respond sensibly and authoritatively to the inevitable evolution of DT. Their findings as the result of their analysis of the impact of DT on an organisation's internal output creation, and the analysis process was performed through the microstructure method of OS to examine the overall situation. Specifically, it was found that, while the tasks were all monitored and completed successfully, the vital step in creating the output sequence was to achieve completion of the tasks by the employees. Then, increasing the information available to decision makers who make decisions regarding task determination, division and grouping became the factor essential to ensuring successful performance and appropriate employee–task matching. Overall, organisations should make sure the OS can run smoothly and have no critical errors in order to achieve effectiveness.

Extant research has no dedicated model for evaluating the effectiveness of DT on organisation structural changes. Therefore, identifying essential factors via a comparative analysis of relevant DT and OS models is necessary. As presented in Table 1, five models for OS and five DT models were selected from prior studies for review (Kidschun et al., 2019; Kotarba, 2018; Sanchez, 2017; Sia et al., 2021).

Table 1: Organisational	Structure and Digital	Transformation models.
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NO.	MODELS	REFERENCE
	OS Models	
1	St Gallen Management (SGM) Model	Rüegg-Stürm, 2005
2	St Gallen Model for Destination Management (SGDM) Model	Klimek, 2019
3	Sustainable Hybrid Business Model	Ferlito & Faraci, 2022
4	Competitive Advantage	Porter, 1998
5	Business Model Generation	Johnson, 2012
	DT Models	
1	Evaluation Model for the Derivation of a Sustainable Digitisation Strategy	Knothe et al., 2018
2	Digital Readiness Assessment	Pirola et al., 2019
3	Digital Readiness Check	Withaneachi et al., 2019
4	Digital Maturity Model	Deloitte, 2018
5	Digital Maturity & Transformation Studies	Back et al., 2015

Important Organisational Structure Models

Rüegg-Stürm (2005) integrated the pioneering work of Hans Ulrich and the ideas of language philosopher Ludwig Wittgenstein in his work at the University of St Gallen. The St Galler Management (SGM) Model contributes to systematic management theory and practice. This model provides a solid understanding of the central management domains, which influence decision making and action. Therefore, the proper strategy can embody a form of thinking, and a search grid promotes the understanding of the complex challenges of managing purpose-oriented social systems in a universal context. Consequently, while organisations are tackling complex management challenges, they can deepen their understanding of the fundamental issues and challenges of business management, in order to be effective.

Klimek (2019), on the other hand, developed a model based on the SGM Model, adapting it for various environmental and social issues. Hence, the new model, called the St Galler Model for Destination Management SGDM), was the result of an innovative approach implemented under a shared vision at the community and regional level. With customer satisfaction as the key destination, the model enables customers to access a holistic destination-management process that is expected to provide tangible effectiveness to the organisation (Klimek, 2019).

In addition, Porter (1998) presents a model that lists a catalogue of factors using competitive advantage (CA). On the other hand, Osterwalder & Pigneur's (2010) model is a business concept map. These two models use a customer base process, which includes the product's value proposition; communication, distribution, and sales channels; customer relationships; revenue sources; essential resources; key activities; key partnerships; and cost structure.

Finally, Ferlito & Faraci's (2022) Sustainable Hybrid Business Model uses a case-study approach. The attractive point is that they based it on customer, employee and investor critiques of business practices that have a negative impact on society or the environment. This model examines business models that rely on hybrid organisations to achieve effectiveness. Furthermore, this model makes researchers aware that the size of an organisation affects business models and DT.

Important Digital Transformation models

Firstly, Knothe et al. (2018) concurred that manufacturing organisations tended to view DT as a challenge more than an opportunity. They explored the capability of an assessment concept that supports a practical and integrated approach to the core elements of a thriving digital strategy. This model is a quick and easily categorised assessment of digital strategies, which derive an integrated transformation roadmap at the strategic level (Knothe, 2018).

Secondly, one of the main issues preventing an organisation from making broader progress in DT is the lack of a clear, industry-oriented roadmap. Several other digital maturity models exist because the scope, perspectives and metrics that

measure DT success vary (Back et al., 2015; Deloitte, 2018). Nevertheless, a digital maturity model will empower organisations at process, resource, and strategic points. Therefore, the digital maturity model is a useful tool that provides a clear path to follow throughout the effectiveness of the transformation process.

Finally, Pirola et al. (2019) and Withaneachi et al. (2019) present digital readiness assessments for different regions. This is case-study research that took place in Italy and Malaysia respectively. Pirola et al. (2019) proposed a comprehensive assessment model suitable for assessing the digital readiness of small and medium-sized enterprises (SMEs). The model for was developed and validated with two pilot case-studies, and the final model was used in a case study of 20 enterprises. This model highlights a list of priorities: Information technology (IT), process, customer, strategy, human and culture. Meanwhile, Withaneachi et al. (2019) examined the digital readiness of non-profit organisations (NPOs) for community development related to the ongoing development of skills in various fields. They conducted in-depth interviews with selected NPOs in the Klang Valley, Malaysia, and analysed digital platforms using ethnomethodological analysis. Their results demonstrate that when managing NPOs, without digital-related priorities, organisations were at a lower level of effectiveness in community development. Thus, this model shows the effectiveness of the organisations' ability to change (from financial to human resources) through digital platforms (Withaneachi et al., 2019).

Overall, these models have their own factors for evaluating the effectiveness of DT on organisation structures. However, for research purposes, the comparative analysis of the selected models was conducted by counting the frequency of occurring factors included in the models (Table 2). They are recorded in the form of binary code (1 = included). From the analysis, the five factors were identified: Technical Resources, Strategy, Culture, Resources (combination of human resources and equipment), and Products & Services. Each factor will be critically discussed below. Figure 1 illustrates the factors for the assessment of the effectiveness of DT in organisations used in this research.

	COUNT	OS1	OS2	OS3	OS4	OS5	DT1	DT2	DT3	DT4	DT5
Technical Resources	9		\checkmark								
Process	8	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Customer	7		\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark
Strategy	6	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark
Human Resources	6		\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	
Culture	5	\checkmark						\checkmark	\checkmark	\checkmark	\checkmark
Equipment	3	\checkmark						\checkmark			\checkmark
Products & Services	2						\checkmark				\checkmark
Service Supplier	1							\checkmark			
Partner	1					\checkmark					

Table 2: Aggregation of Most Occurring Factors in Organisational Structure and Digital Transformation Models

Figure 1: Factors for the Assessment of the Effectiveness of Digital Transformation in Organisations

Technical Resources	
Strategy	
Culture	
Resources	
Products and Services	

Technical Resources. Considering that the entire OS is increasingly being redefined by digital technology, Technical Resources is the most important factor. Technical Resources in this context stands for any DT technical resource that can be applied in the business operation (Back et al., 2015; Deloitte, 2018; Ferlito & Faraci, 2022; Johnson, 2012; Klimek, 2019; Knothe et al., 2018; Pirola et al., 2019; Porter, 1998; Withaneachi et al., 2019). For example, budgeting, costing, security management and communication software are involved in both the OS and DT models. Only in Rüegg-Stürm's (2005) model, is there no mention of Technical Resource, as it focused on the core management area.

Strategy. In this context, refers to decisions related to DT implementation, whether technical resources related or business related (Back et al., 2015; Deloitte, 2018; Klimek, 2019; Pirola et al., 2019; Rüegg-Stürm, 2005; Withaneachi et al., 2019). Through an organisational strategy that is constantly adapted to new market and socially relevant developments, organisations could embed DT across functions and levels, ensuring cross-functional collaboration and controlling technology in line with the desired strategic direction. Stand-alone business strategies are obsolete. 'Digital' must become a core component of business strategy to achieve effectiveness.

Culture. Organisational culture includes the values, norms and attitudes that influence the behaviour of members of an organisation. Loyalty to rules, freedom to be creative, dos and don'ts and the handling of mistakes are all important aspects (Back et al., 2015; Deloitte, 2018; Pirola et al., 2019; Rüegg-Stürm, 2005; Withaneachi et al., 2019). Therefore, organisations should adapt to external changes and foster innovation in order to keep the organisation agile enough to adapt to its near and far environment. Employees should then be involved in the DT process to ensure that the process is unhindered and effective. Overall, culture in combination with the DT model is essential for the sustainable implementation of transformation.

Resources (Employees and Equipment). Resources include human resources (employees) and equipment. The organisation uses resources as factors of production in the process/performance of tasks when achieving its goals effectively (Deloitte, 2018; Ferlito & Faraci, 2022; Klimek, 2019; Knothe et al., 2018; Pirola et al., 2019; Withaneachi et al., 2019). Therefore, both employees and equipment should be continuously developed and improved in a synchronised pattern to ensure that their capabilities are always harmoniously integrated with technological progress.

Products and Services. Products and services, as a result of the value chain, must meet the needs of customers according to certain characteristics (Back et al., 2015; Knothe et al., 2018). Therefore, in this model, the distinction between products and services becomes blurred, as physical products are increasingly complemented by digital services.

RESEARCH METHODOLOGY

The philosophical stance for this research is post-positivism, which is a shift in the positivist paradigm. It continues with most of the key philosophical assumptions of positivism, but in a way that is more than positivism's belief that effects have identifiable causes and actions have predictable outcomes. Rather than assuming a linear causal process, post-positivism recognises outcomes as a mixture of a complex set of factors interacting with each other (Giddings & Grant, 2006). Thus, mixed methods research, as a research methodology that combines qualitative and quantitative methods, was used to collect and analyse data (Giddings & Grant, 2006).

According to Holden & Lynch (2004), the research should not be driven by method. Instead, the philosophical stance of the researcher should determine how the investigation is conducted. The RQs cover a wide range of organisational issues such as organisational operations, facilities management, and many other changes that have occurred as a result of previously unexperienced situations. In this regard, the researcher acknowledges that the research participants produce unevenness, which means that different organisations experience different DT challenges.

Ciesluk et al. (2022) and Yardley & Bishop (2015) suggest mixed methods research to fill the evidence gap and they also confirm that this method could collect empirical data and provide evidence through pragmatic solutions. The mix of a survey and interviews were designed under a sequential basis, using interview data to support and confirm the survey results.

The survey was the main data collection method, and it was designed based on the results from existing studies (Liu et al., 2022; Lowe et al., 2020). Questions included demographic questions and participants' understanding of OS, experiences of DT and perceptions of DT satisfaction. Each factor in the survey was given a score from 1 to 7, with 1 representing "Strongly Disagree" and 7 representing "Strongly Agree". The decision to use a 7-point score was based on research conducted by Dawes (2008) and Linacre (2002). Additional spaces were also added for the participants to add their opinions. Qualtrics was the platform used for publishing the survey and collection of survey responses. The participants qualified only if they had experienced digital transformation while working for at least one organisation in New Zealand. The participant recruitment information with a Qualtrics anonymous link was reposted on Facebook groups, Reddit forms and Pollpool. In addition, 246 emails were sent out to potential participants who met the recruitment criteria, using a snowball sampling method. Due to time and resource constraints, after cleaning up 65 raw survey results (removal of abnormal values), 51 qualified as providing data. These were collected and analysed. The sampling method could have led to a limitation on the basis of subjectivity to some extent, but the post-survey interviews added validity to the findings.

The interviews were arranged based on the interested survey participants who signed their agreement and left their personal contact details. Each interview was about 30 minutes to one hour depending on the participant's availability. Three were completed with narrative data of the participant's personal experiences. After the interview, the written materials were confirmed by the participant. The question selection contained targeted and open-ended questions to obtain more focused and descriptive answers (Galletta, 2013).

Descriptive analysis was used for analysing the survey data. A simple qualitative coding method was used for analysing the participants' experiences and perceptions. The results of the survey and interview data were compared with prior research for enhancing the reliability of the findings.

Furthermore, it is essential to note that this research adhered to ethical guidelines with approval obtained from the Otago Polytechnic Auckland International Campus Research Ethics Committee (AIC108), ensuring that it was conducted with the utmost consideration for ethical standards and participant welfare.

In the interest of transparency and data protection, stringent measures were taken to safeguard the privacy of our participants. These measures included, such as, anonymization, secure storage, and data access restrictions. These steps were taken to ensure the utmost integrity and confidentiality of the research process.

RESULTS

For DT effectiveness the 7-point Likert scale (score 1–7) was used, which means greater than 4 indicates effectiveness (Table 3). A one-sample t-test was used and one-tail P-value was checked, which were all less than .001, which means the data were statistically significant.

Table 3: Participants Responses to Digital Transformation Effectiveness

EFFECTIVENESS	MEAN	VARIANCE
Digital transformation will improve our customers' experience.	5.9	1.42
Digital transformation will improve the whole organisation's productivity.	5.65	1.52
Digital transformation will improve the productivity of other employees in my team/department.	5.63	1.02
The new system will improve our organisation's products and services.	5.62	1.50
Digital transformation will improve my productivity.	5.58	0.92
Digital transformation will improve an organisation's return on investment.	5.5	1.86
The new digital system will be more secure.	5.48	1.78
All resources will be easier to access in the new system.	5.25	1.21

Note: 1. Number of observations = 51

For Challenges, as the researcher used the ranking options, the raw data should be added to the number together for analysis and is summarised in Table 4. The lower number means a more critical challenge was recognised by the participants.

Table 4: Participants Perceived Challenges Responses

CHALLENGES	CUMULATIVE CHALLENGES
Over-reliance on legacy technology	180
Lack of dedicated budget	209
Lack of appropriate technology/tools	228
Lack of suitable in-house skills	244
Internal politics	248
Cultural resistance	292
Data security	334
The preference for short-term thinking over the long-term planning	414
Lack of central co-ordination/ownership	425

CHALLENGES	CUMULATIVE CHALLENGES
Lack of formal strategy/plan	459
Lack of senior management sponsorship	489

For Benefits, the researcher used multiple choice, then converted the participants' choices into 0 or 1, and then added the numbers together (Table 5). The larger number means more critical benefits were recognised by the participants.

Table 5: Participants Perceived Benefits Responses

BENEFITS	CUMULATIVE BENEFITS
Increased revenue	33
Improved customer satisfaction	39
Reduced operating costs	22
Increased business speed and agility	19
Increased market share	15
Improved talent pool and retention rate	15
Reduced development time (product & services)	13

The interview data were analysed based on the six themes presented in Figure 1. The analysis of the interviews mainly sought explanations for the findings from the survey data. Technical Resources has been identified as the driver to DT in New Zealand organisations. One participant stated that the changes in DT affecting OS were mainly seen in the consulting process. This process includes "communication with patients, distributing work content among colleagues, and the management of medication and prescriptions. In the context of the Coronavirus disease (COVID-19) pandemic, new technology was adopted to improve the clinic's ways to communicate the patients. "I can see improved efficiency and patient satisfaction". Another participant confirmed this point with a discussion of the use of online video conferences. "My team pursued live or video streaming online as the offline service was hampered. The technology maintained our communication." An IT technician stressed this point also "My job emphasises technical development, so Technical Resources is an obvious factor. Each time there is a different project requirement, different programming software may be required, even though the core coding remains common." These quotes also explained the top three rated benefits from DT as indicated in Table 3.

However, one participant mentioned the challenge arisen from such adoption of technology: "Moving from traditional face-to-face services to PowerPoint and live-streaming software for services, my team struggled with the use of the functions built into the communication software". While another participant similarly suggested that "People with relevant Technical Resources knowledge were recruited, or additional training was required for the staff". Therefore, DT is costly for organisations as the training employees and testing the technology are unavoidable. Other resources such as software, fibre cables, consultancy were also mentioned by the participants.

Strategy is another factor rated important for DT in the participants' organisations. The discussion about strategies was mostly concerned the COVID-19 which further impacted on their organisations' selection of work modes. Transition to work from home was the most common example.

Products and Services improvement was justified in the adoption of e-documents and addition of service time. One participant suggested that "Our clinic adopted e-prescriptions and e-laboratory referral forms for online patients". Another participant said that "The change in work mode made our working time flexible, and the organisation started offering Sunday services later on."

The interviews provided explanations to four factors which are essential for DT. The other two factors, Culture and Suppliers were not discussed much. One participant speculated the reason was the post COVID-19 influence on those who mostly worked via distance. Culture of an organisation would be not so significant for them. Similarly, the Supplier factor was largely role dependent, for instance if a participant does not have a connection to the suppliers in their organisations, they could not possibly make comments on it.

DISCUSSION AND RECOMMENDATIONS

This research focused on factors for evaluating the effectiveness of DT on OS. The primary data findings were analysed and evaluated to determine their relevance to the literature review. During the literature review, six factors were identified

based on the comparative analysis of OS and DT models. The DT factors in New Zealand organisations were identified as Technical Resources, Strategy, Culture, Resources, Products and Services, and Suppliers. The significant effectiveness of the DT process on OS is validated as aspects of Customer Satisfaction, Finance (revenue, operating costs, and budget), and New Technologies.Based on the findings, a number of recommendations for New Zealand organisations in relation to the six factors are presented:

- Digital transformation is a key topic for organisations. From large financial services institutions, governments, and telecommunications to retailers, all are considering DT. In order to have a successful DT, it is recommended that New Zealand organisations invest in the right technology. For example, financial services and retailers need budgeting and costing software. Government and telecommunication services need security management and communication software.
- It is recommended that New Zealand organisations develop DT strategies that involves all departments. Stand-alone
 organisational strategies are obsolete. Through an organisational strategy implementing DT across all levels will ensure
 cross-functional collaboration and control.
- It is recommended that New Zealand organisations adapt to innovation and involve employees in the change process to ensure that DT flows freely through the organisational structure. The combination of culture and DT facilitates the sustainable implementation of transformation which will make an organisation agile enough to adapt to its immediate environment.
- It is recommended that New Zealand organisations invest in the right equipment and employee training. Employees
 need to be trained and build capability while equipment needs to be improved as DT is implemented, ensuring that
 human capabilities are always harmoniously integrated with technological advances.
- With the implementation of DT, Products and Services can become indistinguishable. This is because physical products
 are increasingly complemented by digital services, so New Zealand organisations require a renewed emphasis on the
 above factors of Technical Resources and Human Resources in order to improve customer satisfaction.
- It is recommended that New Zealand organisations develop Products or Services jointly. Organisations must use the results of DT to integrate their suppliers and adapt various systems in the supply chain, bypassing intermediaries and simplifying communication with suppliers.

In summary, after comparing results from the surveys and interviews with the findings from the literature review, it is suggested that New Zealand organisations focus on a six-factor model to achieve the drivers, goals and benefits of DT such as Customer Satisfaction, Finance (revenue, operating costs and budget) and New Technologies. For example, it was revealed during the analysing of the interview questions that traditional New Zealand organisations focused more on DT during the COVID-19 pandemic. Therefore, specifically, those New Zealand organisations should be more interested in communication and process-management software.

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