

Global Perspectives on Development of the Digital Workplace and Digitalisation of Business Functions

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By

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**Cambridge
Scholars
Publishing**



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This book first published 2025

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

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ISBN: 978-1-0364-4927-8

ISBN (Ebook): 978-1-0364-4928-5

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CHAPTER SUMMARY

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Chapter 3: from isolation to innovation: managing well-being for work-from-home employees in the UK (Author: Dr Mushfiquir Rahman)

Chapter 4: Digitalisation and leadership: evolving roles from traditional to digital paradigms (Author: Dr Mushfiquir Rahman)

Chapter 5: Changing Nature of Digital Marketing Strategies as a Business Function, Evidence from Developing Countries (Author: Dr Md Sadeque Imam Shaikh and Afzal Sayed Munna)

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Chapter 10: Business ethics in the digital era: challenges, transformations, and strategic approaches in developing countries (Author: Dr Mushfiquir Rahman)

CHAPTER 1

UNDERSTANDING DIGITISATION AND DIGITALISATION IN BUSINESS PROCESSES

1.1 Introduction

Digitalisation and digitisation are the key factors affecting businesses in today's linked world. Even though they signify different things, both principles are crucial to turning conventional organisations into tech giants. Digitisation involves digitising analogue data. Digitising paper documents or converting non-digital content to binary might be done. Digitisation makes data storage, retrieval, and computer manipulation easier (Antonucci, Fortune, and Kirchmer, 2021). Digitalisation is fully integrating a company's activities using digital technologies. Data conversion differs from enhancing consumer experiences, building new business models, and improving corporate processes with digital tools and technology. Instead of just digitising data and making it available, a company should actively incorporate digital capabilities into its operations to drive change and innovation (Hendriarto, 2021).

With today's fierce competition, no firm can ignore digitalisation. In today's fast-paced corporate world, only digital technology will do. Using these technologies, businesses may streamline operations, boost productivity, and respond quickly to market changes. Digitisation streamlines data administration, reduces physical storage, and simplifies information transmission and analysis, benefiting enterprises (Frenzel et al., 2021). Digitalisation uses cloud computing, AI, IoT, and big data analytics to change how firms operate and interact with customers. After worldwide disasters like the COVID-19 pandemic, online commerce, remote employment, and digital communication have grown in popularity. As organisations undertake digital transformation, knowing the subtle differences between digitalisation and digitalisation and how they affect business processes becomes more critical (Ritter and Pedersen, 2020).

To provide a complete understanding, this study discusses digitalisation and its functions in corporate operations and their effects on organisational change. Second, digitalisation is using digital technology to improve corporate operations. Third, it is the process of digitising analogue data. This research aims to distinguish the two. The study will analyse these two processes in depth to understand how they assist firms in adapting by boosting efficiency, creativity, and consumer experiences. Digital technology is transforming how organisations function, communicate with consumers, and generate value in the modern world. Examine these changes. Our research will analyse organisations' digital transformation problems. Insufficient staff training, anti-change mentality, and outdated technology may be issues (Queiroz et al., 2021).

The study defines and contrasts the two terminologies before discussing how digitisation has changed business practices. The research will next analyse how firms across all industries use digital technologies to understand digital transformation's more significant consequences. The debate will also address organisational issues in deploying digital technology and alternative solutions. The research will advocate good digitisation and digitalisation process management in an increasingly digital environment to prepare firms for success. After reading the report, readers will understand why digitisation is vital to company success, how it influences corporate performance, and how firms may properly embrace digitalisation.

1.2 Theoretical Framework and Key Concepts

Understanding the difference between digitalisation and digitisation is vital to assessing their effect on business operations. The two thoughts are comparable but replicate excellent levels of virtual development in present-day agencies. Digitisation entails digitising analogue information. This beauty contains digitising paper files and analogue indicators into digital files that may be saved, processed and added (Kovalevska et al., 2022). Digitisation desires to ease storing, retrieving, and changing bodily, non-virtual information. OCR software program applications, scanning machines, and cloud and hard disc storage are widely used. Digitisation improves record safety, storage, and retrieval by eliminating paper (Kondarevych et al., 2020).

Digitalisation entails integrating digital technology into corporation strategies to enhance operations, purchaser interactions, and charge creation. Digitisation uses cloud computing, significant facts analytics, automation,

AI, and the IoT to simplify agency operations, beautify selection-making, and boost workflows (Moşteanu, Faccia, and Cavaliere, 2020). Digital transformation entails integrating digital technology into every company factor, not statistics digitisation. Digitalisation can offer online marketplaces, patron dating management software programs, and fact analytics gear to help organisations meet consumer expectancies (Brockhaus, Buhmann, and Zerfass, 2023).

1.2.1 Key differences and their implications for businesses

The terminology differs in how they express digitalisation's influence on business processes. Digitisation is crucial since it digitises analogue data, even if it does not affect company operations. On the other hand, digitalisation transforms organisations, creating new potential for improvement, consumer involvement, and efficiency. Organisations must understand this disparity to plan new technology integration. Digitalisation eliminates paper and physical storage, but the long-term transformation of business models, procedures, and structures needed to adopt digital technology properly is more significant (Matalamäki and Joensuu-Salo, 2022).

Businesses using these two techniques will have far-reaching consequences. Digital transformation may have long-term strategic benefits, but companies focusing on short-term improvements like lower costs and faster data access risk losing out. Digitally bold organisations are likelier to lose money, disappoint consumers, and beat the competition. A company's digital transformation will fail if it cannot integrate digital technology into its core operations and use it to provide consumers and workers with a seamless, data-driven experience (Rossato and Castellani, 2020).

1.2.2 Theoretical Models and Frameworks

Examining basic theoretical models and frameworks that explain digital technology's diffusion, acceptability, and use in businesses is essential to understanding digitisation. These models may help companies understand digital process transition management's pros and cons (Kraus and Kraus, 2021).

The Technology Acceptance Model helps researchers understand technology adoption. Perceived usefulness and convenience are key to technology acquisition, according to the Technology acquisition Model (TAM). User expectations of the technology's usability determine ease of use, whereas

perceived value depends on how effectively it supports goals (Morze and Strutyńska, 2021). After seeing the effects of digitisation, companies and workers may be cautious about accepting new technologies. Thinking About Migration (TAM) may explain this. If they feel digital technologies are complex or will not help the company, employees will not utilise them. Companies may utilise these facts to lay out compelling, individual-exceptional virtual items to boom adoption (Benítez et al., 2022).

The Diffusion of Innovations (DOI) speculation through Everett Rogers sheds light on how quickly companies adopt digital technology. Rogers' five-step innovation selection device includes data collection, persuasion, desire, implementation, and verification. People determine a concept through the use of their private criteria and decide whether or not it, in reality, accepts it. This concept indicates a three-step approach to incorporating digital generation (Marnewick and Marnewick, 2022). Internal or outside the business enterprise, digitisation activities can also gain from this method. If managers and personnel hire the same strategies, cloud computing and AI can be better understood, analysed, and deployed. According to the idea, adoption quotes are frequently tier-based, with pioneers and early adopters at the pinnacle and the relaxation within the centre. By identifying stakeholders at every adoption stage, businesses may also optimise digital transformation mission planning and management (Thrassou et al., 2020).

Use business enterprise technique reengineering (BPR) to recognise digitalisation. Businesses may additionally enhance rate, efficiency, and production through revamping techniques. To optimise virtual technology utilisation, automate, assess, and take away steps. Business system remodels (BPR) might also additionally beautify virtual resource performance. Data analytics and operational automation can streamline order fulfilment, improving client pride and transport times. BPR's reengineering method emphasises using the digital era to improve middle business enterprise sports activities (Pfister and Lehmann, 2023).

The agency's final product, Resource-Based View (RBV), allows corporations to control aggressive virtual belongings. RBV indicates that statistics, technology, and virtual skills may be key to a corporation's long-term fulfilment. Businesses may improve productivity, stand out, and provide value to customers with digital assets. Cutting-edge data analytics and machine learning techniques may help a firm understand its clients' preferences and address their demands. Companies can get a hard-to-replicate edge by exploiting these digital assets (Westerlund, 2020).

TAM, DOI, BPR, and RBV theoretical frameworks can help explain the adoption of businesses' digital strategy. Learn how to improve the company's management and maximise digital transformation. Differentiating digitalisation from digitalisation can improve operations, innovation, and opportunity. These concepts and frameworks will guide firms' digital transformations (Kamal, 2020).

1.3 Role and Impact of Digitisation in Business Processes

Automating Administrative Tasks: Explain how digitisation automates manual tasks (e.g., data entry, document storage) to reduce errors, save time, and improve efficiency.

Data Management and Access: Discuss how digitisation enables businesses to manage large volumes of data more efficiently and access information quickly for decision-making.

Improved Efficiency and Cost Savings: Analyze the financial benefits of digitisation, such as reducing operational costs (e.g., paper, storage, human resources).

Case Study: Provide an example of a company that has successfully implemented digitisation in its processes (e.g., digital document management in healthcare or finance).

1.4 Role and Impact of Digitalisation in Business Processes

Digitalisation improves operational efficiency, customer engagement, innovation, and data-driven decision-making in company operations. Digital technology alters everything for companies who want to keep up with the market. Digitisation allows organisations to streamline operations, tailor customer experiences, create new revenue, and act on data insights. This transition creates new client engagement methods and organisational changes (Mugurusi, Korsen, and Eshaghzadeh, 2021).

Business process optimisation is one of the most significant benefits of digitalisation. Most firms still utilise time-consuming, error-prone, paper-based manual operations. With digital technology, workflows may be automated, jobs streamlined, and inefficiencies removed. Employees may spend more time on creative, analytical work by automating data input, invoice processing, and inventory management (Adomako et al., 2021). Digitalisation's automation and technological integration across

departments create a more connected and unified company. By integrating HR, finance, supply chain, and customer service into an ERP system, firms may simplify operations, decrease human data entry, and share real-time data. Results: improved operational efficiency, lower expenses, and higher production (Stjepić, Ivančić, and Vugec, 2020).

The best utilisation of digital processes demands comprehensive data analytics. Big data lets businesses collect large amounts of data from internal operations, social media, and customers. Data analytics solutions help companies gain insights, identify trends, and improve operations (Broccardo et al., 2023). Data analytics lets a corporation track product levels in many warehouses and modify inventory based on customer demand. This cuts waste and boosts product availability. Predictive analytics helps businesses anticipate and adjust to market and customer changes. Digitalisation may improve efficiency, agility, and competitiveness through data-driven process optimisation (Hendrawan et al., 2024).

Digitisation also improves customer service. Digital companies must innovate because clients anticipate much. Thus, you must find new ways to reach customers, tailor your products and services to their demands, and ensure everything works smoothly. Digitisation helps firms understand customers, monitor preferences, and tailor services (Li et al., 2020). Customer relationship management (CRM) systems retain comprehensive client profiles, record interactions, and arrange communications, improving customer service. CRMs may improve targeted advertisements through marketing automation and social media. Mobile apps and self-service portals make transactions and service access more personal and convenient (Mappingire, Smuts, and Van der Merwe, 2022).

Digitisation improves response times and customer service, enabling real-time client involvement. Businesses use AI chatbots to improve customer service. AI-driven systems can answer client questions, solve problems, and reply 24/7 without a human connection. Automation enhances customer service and costs. Interactive, customised, and dynamic digital experiences increase customer satisfaction and loyalty. Digitalisation also creates new business models (Nasiri et al., 2023). The new income opportunities offered by digital technology have caused organisations to reassess their strategies. Internet shopping's rapid rise is the most obvious example. Alibaba, Amazon, and eBay dominate retail. Online sales may save firms money and increase client reach. Successful online shops track client behaviour, streamline inventory management, and customise offerings (Kovalevska et al., 2022).

The subscription model is another key digital transformation in corporate strategies. Adobe, Spotify, and Netflix are digital content and software providers that use subscription models. Offering ongoing service may help businesses make money and keep clients. Digitisation has also boosted platform-based business models (Antonucci, Fortune, and Kirchmer, 2021). Uber and Airbnb are examples of online platforms that connected customers and service providers, creating the gig economy. These platforms function as middlemen for user-to-user transactions without holding assets. Digital platforms provide rapid growth and profit without high running costs (Frenzel et al., 2021).

The main benefit of digitisation is data-driven decision-making. Businesses use anecdotes and historical data to make choices. Artificial intelligence algorithms, big data analytics, and BI technology enable enterprises to manage large data sets. Business intelligence (BI) solutions give managers real-time insights into essential performance metrics by combining and analysing data from multiple sources. Businesses may analyse employee, customer, and sales trends using business intelligence (BI) solutions (Ritter and Pedersen, 2020).

Big data analytics searches vast databases for hidden patterns and correlations for better decision-making. Information from social media, online purchases, and a company's website can disclose customer behaviour, trends, and strategic decisions. A clothing company may use sales data to determine seasonal bestsellers and adjust its inventory and marketing. AI and machine learning algorithms may anticipate future occurrences from historical data, which may help firms make better decisions and handle volatile markets (Kovalevska et al., 2022).

A successful example of digitisation is Amazon, which has changed drastically since its founding. Using digital technologies, Amazon went from an internet bookshop to a multi-industry giant. Amazon started its digital transition by creating an online platform to compete with brick-and-mortar stores. Consumers benefited from lower prices, more flexible delivery, and a wider product selection (Kondarevych et al., 2020). Data analytics helped the firm personalise suggestions, improve inventory management, and estimate consumer demand, advancing its digital transition. AWS, Amazon's cloud computing initiative, has helped the company develop by offering businesses scalable, low-cost computing. The company has increased revenue and maintained its digital market leadership by strengthening its business strategy and creating new subscription-based services like Amazon Prime (Moşteanu, Faccia, and Cavaliere, 2020).

Finally, digitalisation has helped organisations simplify operations, improve customer interaction, establish business models, and make data-driven choices. More organisations realise that digital technology can enhance growth, efficiency, and competitiveness. Amazon and other companies' spectacular success shows how digitalisation may disrupt everything. These companies have transformed sectors, benefitting everybody (Frenzel et al., 2021).

1.5 The Challenges of Implementing Digitisation and Digitalisation

To leverage digital technology, businesses must solve the many issues generated by digitisation and business process digitisation. These challenges are complex and include technology and people. Organisational opposition to change, challenges updating outdated systems, cybersecurity concerns, and the requirement for continual staff training may hinder a digital-first strategy. Digital transformation projects must address these difficulties with a customised approach that considers leadership and technological solutions. By studying these topics, organisations may better understand their issues and how to tackle them (Antonucci, Fortune, and Kirchmer, 2021).

Organisational change resistance hinders digitisation. People dislike change, especially when it means changing habits, routines, and workflows. This opposition can come from entry-level workers to C-suite executives, frequently due to job security concerns, change aversion, or procedure challenges. The 8-Step Change Model by Kotter helps explain how resistance might impede digital transformation and how to overcome it. Kotter says building urgency is the first step to overcoming opposition. There is a need to make sure all staff understand the move and its benefits to the organisation. Executives should outline all the benefits of digitisation to their organisation and customers to create a compelling argument. Enhanced efficiency, competitive advantage, and delighted consumers are examples. A guiding coalition—a powerful group of leaders—is needed to achieve digital change. These leaders must address concerns and inspire change (Kovalevska et al., 2022).

Kotter says organization-wide communication regarding the change aims while creating the coalition is crucial. Staff must understand the strategic and operational goals of digital transformation to prepare for the change. Communicating freely may reduce worry and doubt. In the fourth stage,

"enabling others to act on the vision," we remove obstacles like obsolete technology and inadequate training (Rossato and Castellani, 2020). Businesses should teach employees how to prosper in the digital economy. This involves providing the necessary training and materials. Kotter's last steps for overcoming opposition include integrating new strategies into the organisational culture, developing momentum, and achieving short-term victories. These methods must be regularly updated and altered to maintain digital transformation results. These approaches may assist organisations in promoting flexibility and lessen digitisation resistance (Kraus and Kraus, 2021).

Businesses now face several hurdles, including providing technological infrastructure for digital projects. Despite numerous new internet solutions, many firms still employ 1990s software. These outdated systems provide digitalisation issues due to their incompatibility with contemporary technology and possible incapacity to fulfil digital duties (Mugurusi, Korsen, and Eshaghzadeh, 2021). Big enterprises with plenty of data and applications may find system replacements and upgrades costly and time-consuming. Businesses are cautious about fully embracing digital transformation owing to disruption and infrastructure costs. Businesses must also address data transfer, integration, and old-new system compatibility. Evaluating all digital devices is laborious and error-prone, which might cause further issues (Stjepić, Ivančić, and Vugec, 2020).

Businesses face new data privacy and cybersecurity problems owing to digitalisation. As more companies go online, personally identifiable information is generated and transferred exponentially. Cyberattacks threaten consumer, financial, intellectual, and employee data. As internet sales expand, so do data breaches, hacking attempts, and ransomware attacks. Consumers' personal information breaches can cause dissatisfaction, negative reviews, and legal and financial issues. The GDPR and other data storage and processing laws have made data collection harder. Ignoring these guidelines may damage reputations. Cryptography, MFA, and security audits can secure digital assets and fulfil privacy regulations (Adomako et al., 2021).

Businesses undergoing digital transformation confront various problems, including security, technology, and training and talent shortages. Employees must be flexible and open to learning to be competitive in the digital age. Employees in many companies lack the technical skills to use growing digital technology successfully. This imbalance is especially evident in industries that have been sluggish in adopting digital technology or lack

skilled workers (Antonucci, Fortune, and Kirchmer, 2021). Continuous professional growth can assist employees in overcoming this problem. These programs may involve technical training on specific digital technologies and educational campaigns on how digitisation has affected company strategy, data management, and cybersecurity. Businesses may also need to hire digitally skilled personnel to augment existing staff and get new views. As digital technology advances, CPD and lifetime learning will become more critical (Kovalevska et al., 2022).

Blockbuster fell bankrupt after failing to adapt to digital streaming. This is just one of several companies that struggled to digitise. Blockbuster's demise should teach firms to resist change or overlook new technology. Blockbuster was the market leader in US video rental with hundreds of outlets (Rossato and Castellani, 2020). Blockbuster had to adapt its business model to compete with Hulu and Netflix in the early 2000s. Blockbuster could have entered the streaming sector with its infrastructure but stuck to renting DVDs and VHS cassettes in shops. The company's failure to adapt to new technology and predict consumer desires for on-demand streaming led to its downfall (Kondarevych et al., 2020).

Blockbuster's reluctance to digitise caused several issues. First, the change's vitality was ignored. Second, the firm was unwilling to explore new methods and technology. Finally, outdated approaches were used in the digital age. Blockbuster was vulnerable to competition because it was slow to adapt to digital streaming and missed out on the expanding demand for online entertainment. Modern companies must be adaptive, open to digital change, and tolerant of new business models to withstand losses like these (Kovalevska et al., 2022).

To conclude, digitalisation and implementation face several obstacles. These include organisational reluctance to change, technology infrastructure challenges, cybersecurity concerns, and talent gaps. These issues may be addressed by investing in people, technology, and lifelong learning. Businesses must address these difficulties during digital transformation to succeed in today's digital economy (Rossato and Castellani, 2020).

1.6 Digitisation and Digitalisation in Different Business Sectors

Digitalisation and digitisation have transformed client relations, process execution, and service delivery across various sectors. These industries have adopted technology differently, but they have all found ways to improve

productivity, save money, and improve patient and customer outcomes using AI, data analytics, and automation. By reading these areas, we can better understand how digitalisation affects one-of-a-kind sectors and inspires company innovation (Frenzel et al., 2021).

Industry four has transformed commercial enterprise operations through clever technology like automation, the IoT, and AI. These structures can immediately acquire and analyse vast records, enhancing delivery chain manipulation, manufacturing strains, and predictive renovation. IoT sensors on machines can expect problems, decreasing preservation charges and downtime (Ritter and Pedersen, 2020). Predictive protection uses historical and actual-time statistics to discover device restoration desires to avoid reactive maintenance. This technique reduces highly-priced interruptions and extends system life to boost manufacturing overall performance. AI-included production improves inventory management, amongst different blessings. Automation of production plans and demand prediction adjustments is another (Frenzel et al., 2021).

This might boost supply chain efficiency by lowering inventory and optimising resources. Automation has boosted industrial output. Automated systems and robots do monotonous but essential tasks, freeing up workers to innovate and enhance processes. "Industry 4.0" depicts the digital transformation of production, which has lowered lead times, enhanced flexibility, and improved consumer response. GE has transformed industrial processes using digital technologies. GE's "digital twins" use data analytics and IoT to simulate real-time functioning. This invention has enhanced productivity, risk reduction, and equipment performance estimations across GE (Rossato and Castellani, 2020).

Online shopping, consumer data analytics, and multichannel strategy have transformed retail. Online buying may result in a more customised shopping experience due to rapid data collecting and analysis. E-commerce allows businesses to reach clients worldwide and enable them to purchase whenever and wherever they choose. Businesses may improve the shopping experience by tracking consumers' preferences, purchases, and online activity. Businesses may customise ads, promotions, and customer service for each consumer. Merchants need data analytics to make product, pricing, and promotional decisions throughout this transformation (Adomako et al., 2021).

Data analytics may boost merchants ' profits by predicting consumer demand, optimising inventory levels, and reducing surplus inventory.

Omnichannel efforts have enhanced consumer experience by merging online and offline interactions. Due to technology, online, in-store, and return purchases may now be seamless (Antonucci, Fortune, and Kirchmer, 2021). The ability to integrate various points of touch is a vast retail benefit. Amazon revolutionised retail with its logistical network, data-driven suggestions, and e-commerce platform. Amazon Prime and its omnichannel approach ensure fast delivery, while its consumer data analytics allow it to personalise its services. The firm leads e-commerce with AI-powered warehouse management and predictive delivery (Moşteanu, Faccia, and Cavaliere, 2020).

Operating efficiency and patient care have also been affected by digitisation. Electronic health records (EHR) and other digital patient data-keeping systems have supplanted paper-based approaches, making patient data access, sharing, and updating easier. The digital revolution has enhanced diagnosis, treatment, and patient care (Kraus and Kraus, 2021). Electronic health records (EHRs) assist doctors in making better judgements, prevent medical mistakes, and ensure uniform care among providers by giving a more complete health history. Telemedicine and other digital technologies let more people, especially in rural regions, access medical care (Kovalevska et al., 2022).

Telemedicine lets doctors provide virtual consultations, remote monitoring, and more without patients travelling far. Healthcare is more accessible, effective, and affordable than ever, especially in low-income nations. Since activity trackers and vital sign monitors are readily available, patients are more likely to participate in therapy. Real-time data for patients and clinicians improves treatment and diagnosis (Stjepić, Ivančić, and Vugec, 2020). The National Health Service's digital records management and telemedicine projects have improved healthcare for millions of Brits. Digital technology has helped the NHS reduce administrative costs, enhance patient outcomes, streamline operations, and boost patient engagement. Digital health technology may make healthcare more inexpensive, accessible, and personalised (Mugurusi, Korsen, and Eshaghzadeh, 2021).

Fintech and internet banking have enhanced banking services due to digitalisation in the financial industry. Blockchain technologies, mobile payment systems, and AI-driven investing platforms have made financial services more accessible, efficient, and secure. Mobile payment systems like Apple Pay, Google Wallet, and others allow phone payments. Modern encryption and biometric identification make digital payments safer and more convenient for users. Blockchain, a decentralised digital ledger that

enhances identity verification, asset management, and transaction security, is popular in banking (Kovalevska et al., 2022).

Blockchain technology has untapped potential in supply chain management, worldwide payments, smart contracts, and cryptocurrencies like Bitcoin. AI has significantly impacted investment management and fraud detection in the financial sector. Large and small investors may use AI-powered tools to scan massive data sets for investment possibilities, forecast market trends, and make data-driven choices. PayPal pioneered safe, rapid, and convenient online payment options in digital banking. Integration with e-commerce platforms and PayPal's mobile app simplifies consumer payments. This tool simplifies invoices, subscriptions, and company costs (Frenzel et al., 2021).

Technology permeates corporate operations as numerous sectors digitise. AI and the IoT in manufacturing, e-commerce, and mobile payment systems in retail and banking are changing corporate operations and value distribution. While each industry faces distinct difficulties and possibilities, all progressively use digital technology to improve productivity, customer experience, and business models. In an increasingly digital environment, firms in various areas are digitising to succeed (Kondarevych et al., 2020).

1.7 Future Trends in Digitisation and Digitalisation

New technologies can change digitisation and company processes. As we go towards a digital future, blockchain, IoT, cloud computing, and AI will transform enterprises. These innovations might improve operational efficiency, create new company models, and customise customer interactions. In several sectors, artificial intelligence (AI) automates corporate operations, provides predictive insights, and improves decision-making. Machine learning algorithms can quickly examine enormous datasets, find trends, and offer suggestions without human interaction (Antonucci, Fortune, and Kirchmer, 2021). Businesses may become proactive by identifying patterns and making adjustments before issues occur. AI models can predict equipment failures by studying past data, allowing firms to fix the problems before they affect operations. Predictive maintenance is being used in more industrial operations. AI algorithms analyse spending habits and detect abnormalities to detect fraudulent transactions, reassuring companies and customers. Chatbots and virtual assistants are revolutionising customer service by automating monotonous chores, giving rapid support, and customising solutions (Ritter and Pedersen, 2020).

Blockchain technology, initially linked with cryptocurrencies, is increasingly becoming crucial in company digital transformation because it promotes transparency, eradicates fraud, and expedites procedures. Blockchain eliminates the need for trusted third parties by creating permanent, unchangeable records of financial transactions. Blockchain technology might change supply chain management by tracking items from origin to destination in real time. Thus, fraud and counterfeiting are reduced, and transparency is increased (Frenzel et al., 2021). Logistics and inventory management traceability may increase operational efficiency by giving precise and real-time data on items and resources. Blockchain technology allows safe, real-time transactions that circumvent banks, transforming the financial system. Healthcare banking and supply chain management are among the industries that blockchain technology will alter. Blockchain technology secures and shares patient data for authorised staff. Blockchain technology in company operations may improve security, cost, and operations (Kovalevska et al., 2022).

Other emerging technologies affecting digitisation include the Internet of Things (IoT). A network of computer devices that can communicate data via the Internet is dubbed the "Internet of Things". IoT sensors in industrial equipment offer real-time issue diagnosis and performance tracking, reducing downtime and enabling predictive maintenance. Internet of Things devices transform inventory management by providing real-time stock data to shops. Companies use this data to improve supply networks and reduce waste (Antonucci, Fortune, and Kirchmer, 2021). Companies may now personalise their offerings via the Internet of Things. In the "smart home" trend, lights, security cameras, and thermostats may learn their owners' patterns and optimise comfort and efficiency. IoT apps allow businesses to personalise their offerings, which boosts customer satisfaction and loyalty. By revealing customer behaviour, Internet of Things data may help organisations make better data-driven decisions (Moşteanu, Faccia, and Cavaliere, 2020).

The following digital revolution will depend on cloud computing. Cloud computing has made scalable, low-cost digital infrastructure available to more enterprises. Cloud computing may reduce companies' IT and hardware expenditures. Remote computers process and store data. As demands change, its adaptability lets organisations meet client expectations without exhausting resources. Cloud-hosted solutions enable worldwide access to data and apps, improving collaboration in today's remote workforce (Antonucci, Fortune, and Kirchmer, 2021). Companies are moving to the cloud for improved decision-making, simpler processes, and faster

innovation. Cloud computing allows banks and other financial organisations to provide consumers with real-time financial data and analysis. Data-driven decisions may boost a company's profits. Cloud computing digitises medical data and connects healthcare workers, improving patient care efficiency and interoperability. Cloud data sharing is essential for data-secure and regulatory-compliant financial firms (Rossato and Castellani, 2020).

Businesses aim to decrease their environmental footprint and increase efficiency, making sustainability a crucial aspect of digitalisation. Revolutionary digital technology may help firms reduce energy consumption and carbon impact. AI and IoT can optimise energy utilisation in supply chains, manufacturing facilities, and buildings, reducing waste. IoT sensors that monitor lighting, temperature, and energy consumption in real time may help businesses uncover inefficiencies and conserve (Antonucci, Fortune, and Kirchmer, 2021). Cloud computing may reduce energy usage in on-premises data centres. More organisations are moving to cloud-based infrastructure to minimise energy usage and carbon emissions, making the digital future greener. As customers and investors value sustainability, businesses that use these methods will help the environment and gain an edge over their competition (Adomako et al., 2021).

Due to the COVID-19 pandemic, various industries have increased their digital adoption. Businesses are embracing Slack, Zoom, and Microsoft Teams to keep remote workers connected and productive throughout the pandemic. Due to this trend, cloud computing and other remote work and collaboration solutions have risen in importance (Stjepić, Ivančić, and Vugec, 2020). Due to the pandemic, meeting in person has become difficult or impossible. Thus, businesses have hastened to embrace digital client engagement techniques. Modern businesses rely on digital marketing, online customer support, and e-commerce. The pandemic drove enterprises to pursue digital projects they had previously avoided. Businesses will quickly digitalise following the outbreak because they need these tools to compete and survive (Kovalevska et al., 2022).

Finally, digitalisation, cloud computing, blockchain, AI, and the IoT will shape digitalisation's future. These technologies will advance sustainability, consumer satisfaction, and operational efficiency. These digital tools help organisations stay competitive, expand, and access new business models. The COVID-19 epidemic has highlighted the need for digital transformation and accelerated the use of digital technologies and methods. These

developments will shift substantially in business (Mugurusi, Korsen, and Eshaghzadeh, 2021).

1.8 Strategic Recommendations for Businesses

Companies must have a thorough digital strategy to gain from digitisation. To successfully integrate digital technology into its operations, a firm needs a well-planned digital strategy that aligns with its business goals. Businesses should examine their digital capabilities before creating a digital strategy to support ongoing innovation. By doing so, they can find innovation and efficiency opportunities (Kraus and Kraus, 2021). Investigate data management, customer engagement, and technology. When they understand these areas, businesses should create realistic digital transformation goals. These goals should support more significant corporate objectives to improve operational efficiency, client experiences, or income sources. The digital strategy is a constant activity that adapts to market needs and technology. The organisation will be better able to address client demands in the ever-changing digital market (Frenzel et al., 2021).

In today's digital market, companies must adopt new technologies to survive. An innovative culture that encourages risk-taking and adaptation is more vital than technology. Enterprises should include AI, blockchain, and IoT when evaluating ROI and ensuring it meets goals. Research and development are significant priorities for competitive companies. This can only be done by finding innovative ways to enhance products or business models (Ritter and Pedersen, 2020). Employees are more creative when encouraged to participate, speak their thoughts, and find innovative solutions to problems. To promote this approach, companies may create innovation laboratories or teams to study new technology and its advantages. Businesses must continually evaluate their technology and consider how new technologies might help them grow to be nimble and capitalise on digital transformation (Kovalevska et al., 2022).

Employee involvement and training become crucial as more firms implement digital transformation initiatives. Digital transformation depends on people's tech skills. In today's digital workplace, organisations must invest heavily in staff training. The education should start with software basics before data analytics, cybersecurity, and AI. Training must be continual since digital technologies are dynamic (Rossato and Castellani, 2020). Staff who can learn continuously will stay relevant and feel more involved in the transition. Create an engaging workplace to inspire employee engagement in the digital revolution. Building channels for

feedback and idea exchange, communicating the benefits of digitalisation, and including staff in decision-making can help. Employee goals that align with the company's digital strategy improve digital transformation success (Antonucci, Fortune, and Kirchmer, 2021).

Cybersecurity has risen in relevance in the digital age. Businesses need to safeguard data and assets more than ever using digital technologies. Implementing strong cybersecurity rules protects businesses against cyberattacks, data breaches, and other security risks. Thus, multi-layered security is essential, including firewalls, encryption, authentication, and security audits. Since human error is the weakest link in security, staff must be trained on cybersecurity best practices, including phishing detection and password generation (Kondarevych et al., 2020). General Data Protection Regulation is crucial to cybersecurity. Businesses may rest assured that their data handling is transparent and safe. If companies violate data protection regulations, their reputation and bottom line suffer. Businesses can protect their digital assets, rebuild customer confidence, and avoid cyberattacks by taking cybersecurity seriously and being proactive (Moşteanu, Faccia, and Cavaliere, 2020).

Departmental collaboration is essential for digital transformation integration. Digital transformation requires more than IT collaboration. HR, marketing, operations, and finance are involved. Businesses need multidisciplinary teams to lead digital initiatives and combine varied talents and knowledge. These subgroups aim to discover which business units benefit most from digital transformation and develop plans to improve operational efficiency with digital technology (Kovalevska et al., 2022). Marketing and IT can improve customer interactions using CRM solutions, while operations teams may streamline supply chain operations with data analytics. Collaboration across departments enhances the possibility of digital tools and technology becoming standard operating procedures, increasing output per unit effort. Multidisciplinary teams may establish a unified digital strategy to help all departments achieve business goals (Kovalevska et al., 2022).

Finally, companies need a plan before becoming digital. A successful digital transformation requires a well-defined digital strategy that supports organisational goals, openness to new technologies, staff training, and cybersecurity. Digitising daily activities requires a company-wide drive. These methods allow companies to build a digital innovation foundation and stay ahead. As digitalisation undermines many industries, nimble, tech-savvy organisations will flourish (Ritter and Pedersen, 2020).

1.9 Conclusion

This study examined how digitisation affects innovation, customer service, and efficiency in modern organisations. With the definitions of both terms, we can use digitalisation to define the process of digitising analogue information and the broader use of digital technology to change business processes and create new models. Businesses must embrace digitalisation in the information era. It improves operational efficiency and competitiveness. To analyse business processes, we employed theoretical frameworks, including the Technology Acceptance Model (TAM), Diffusion of Innovations (DI), Resource-Based View (RBV), and business process reengineering (BPR). These approaches focus on change management and strategy. Digitalisation can improve decision-making and streamline procedures through advanced data analytics, as well as encourage creativity and new business models, which are crucial in the digital economy, according to the report.

Digitalisation has been debated for its ability to streamline and improve corporate operations. Efficiency may be maximised by automating repetitive operations, using predictive analytics to make decisions, and integrating corporate systems. Digitalisation improves internal processes and consumer service. These include tailored services, enhanced consumer involvement, and new communication methods via self-service portals, CRM systems, and mobile apps. Process optimisation and business model innovation are benefits of digitalisation. Digital technology has helped Amazon and Netflix alter sectors and generate new money. According to the research, using digital technology to be more data-driven, inventive, and nimble will determine organisations' success or failure.

There are obstacles to comprehensive digital transformation. The survey found that firms' main issues are employees' skills, cybersecurity concerns, infrastructure constraints, and change resistance. Organisational resistance—a fundamental component of Kotter's 8-Step Change Model—occurs when leaders and workers are sceptical of new technologies. Older systems may hinder digitisation due to the time and money required to upgrade or replace them. Data privacy and cybersecurity issues hinder digital development. These concerns have increased due to GDPR and cyber threats. Additionally, firms struggle to recruit skilled workers. Companies should spend on staff training and development to fix this. Despite these obstacles, judicious investment may help organisations shift to digital smoothly and profitably.