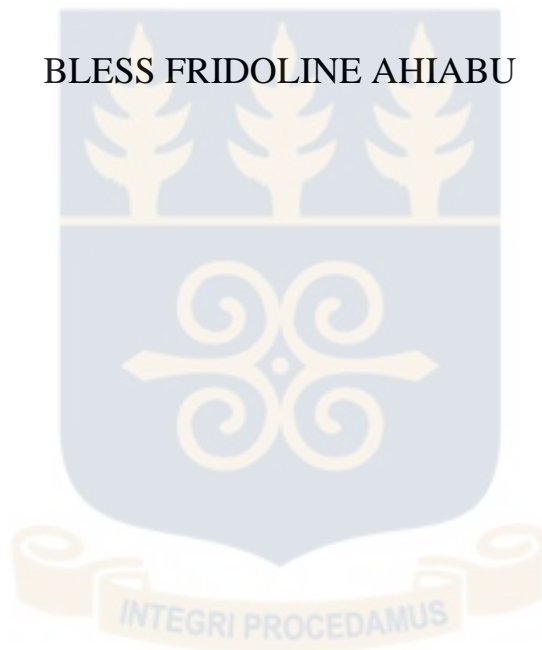


UNIVERSITY OF GHANA
COLLEGE OF HUMANITIES

**EXPLORING THE IMPACT OF DIGITAL TRANSFORMATION ON
GHANA'S TOURISM AND HOSPITALITY INDUSTRY**

BY

BLESS FRIDOLINE AHIABU



UNIVERSITY OF GHANA

DEPARTMENT OF OPERATIONS AND MANAGEMENT INFORMATION
SYSTEMS

MAY, 2025

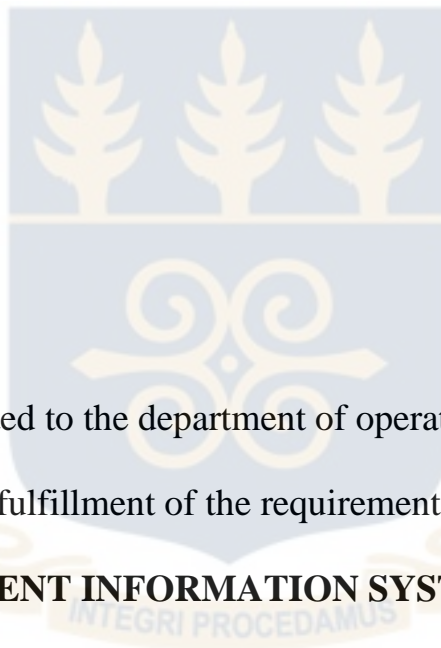
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BLESS FRIDOLINE AHIABU

(10933974)



This thesis is submitted to the department of operations the University of Ghana, Legon in partial fulfillment of the requirement for the award of **MPHIL**
IN MANAGEMENT INFORMATION SYSTEMS DEGREE.

UNIVERSITY OF GHANA

MAY, 2025

DECLARATION

I declare that this thesis is my research and has not been submitted by anyone for the award of any academic degree in this or any other University. All the references used in the work have been fully acknowledged.

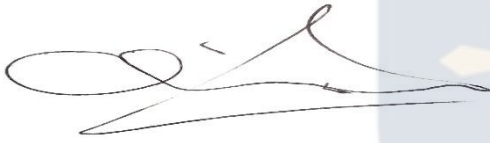


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ABSTRACT

Digital transformation uses digital technology tools to change a company's business model, products, or organizational structures, improving its operations, processes, and overall customer value proposition. Tourism and hospitality activities are needed for a nation's cultural, social, economic, and development, providing employment opportunities, earning foreign income, preserving communities' cultural and historical heritages, and conserving the environment. However, there seems to be little or no empirical research about digital transformation in Ghana's tourism and hospitality industry. The critical success factor theory was adopted for the study, which has not been used in previous studies concerning digital transformation.

The study examines the impact of digital transformation on Ghana's tourism and hospitality industry. The research objectives are to determine the current state of digital transformation in Ghana's tourism industry, to explore the enablers and challenges hindering the adoption of digital technologies, and to assess the impact of digital technologies on digital transformation in the tourism and hospitality industry. A qualitative approach was adopted, and a convenient and judgmental technique was used to choose participants. A total of 15 participants were used for the study, and interviews were conducted to collect data. Furthermore, to address the research inquiries presented, the study employed Miles and Huberman's data analysis approach to scrutinize the information acquired from the interviews.

The findings revealed that the term 'Digital Transformation' is new to most participants, although they used digital technologies in the firms. According to the findings, digital technologies used in Ghana's tourism and hospitality industry include Facebook, Website,

Instagram, Mobile phones, Laptops, Closed Circuit Television (CCTV) Cameras, Emails, Smartphones, digital televisions, and Property Management Systems (PMS). It was discovered that the adoption and use of these digital technologies have enhanced collaboration and communication among the various stakeholders in the industry. Digital transformation has led to decreased human involvement, fostering enhanced operational efficiency. The facilitators of this transformation include industrial and government support, operational compatibility, and the widespread availability and acceptance of digital technologies. Conversely, notable challenges encompass high data, airtime, and electricity costs, poor network coverage in urban and rural areas, and cyber-attacks.

The study recommends that effective sensitization is needed to empower stakeholders to grasp the concept of digital transformation and excel in the swiftly changing digital landscape, fostering innovation and enhanced guest experiences. The Government should collaborate with telecommunication agencies to enhance internet accessibility and coverage. There is a need for stakeholder engagement on the causes of high data cost in Ghana and the possible means of making data affordable to enhance the digital transformation drive. There is also a need for more research in cybersecurity in the tourism hospitality industry to enhance the security effectiveness of digital payment platforms since firms are uncomfortable using payment systems due to frequent cyberattacks.

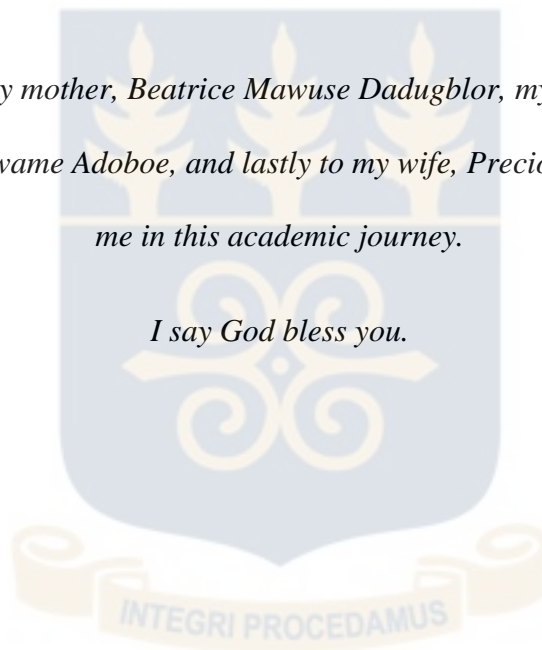
The limitations of the study include varying Success Factor Theory constructs, focusing solely on service providers, and time constraints hindering deeper exploration of digital transformation impacts and causing brief, delayed participant interviews. Future studies in this domain would benefit from a mixed-method approach, blending qualitative and quantitative methods. Exploring the impact of digital transformation from customers' viewpoints may also provide insights into preferences and service interactions. Integrating

Critical Success Factor theory with other frameworks will also expand understanding, contributing to valuable holistic analyses for academia and industry practitioners.

DEDICATION

I dedicate this work to my mother, Beatrice Mawuse Dadugblor, my uncles Benjamin Adoboe and Charles Semavor Kwame Adoboe, and lastly to my wife, Precious Akpadzi, who stood by me in this academic journey.

I say God bless you.



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I am also grateful for the encouragement from my MPhil in Management Information Systems program colleagues.

Finally, I would like to thank all those who accepted my invitation to participate in this study as participants.



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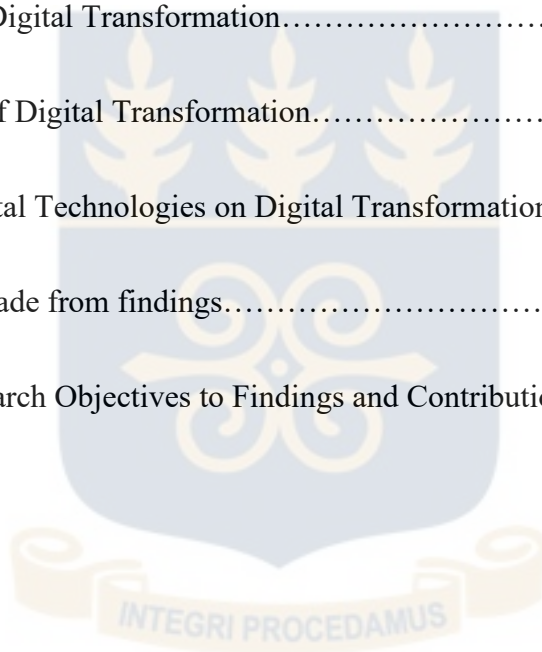
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LIST OF ACRONYMS AND ABBREVIATIONS

AI	Artificial Intelligence
BCG	Boston Consulting Group
CCTV	Closed-Circuit Television
CSF	Critical Success Factor
EHL	Is the name of a university in Singapore
Lyft	Is the ride-hailing application
GDP	Gross Domestic Product
ICTs	Information Communication Technology
IoT	Internet of Things
IS	Information System
IT	Information Technology
ITU	International Telecommunication Union
KPIs	Key Performance Indicators
MIS	Management Information Systems
MoMo	Mobile Money
OTA	Online Travel Agency
PDF	Portable Document Format
PMS	Property Management System
ROI	Return on Investment

SMEs	Small and Medium-Sized Enterprises
Uber	Is a ride-hailing application
VUCA	Volatility, Uncertainty, Complexity, and Ambiguity.



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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Conducting a study on digital transformation in Ghana's tourism and hospitality industry is essential. It can provide valuable insights into the current state of digitalization (He, Meadows, Angwin, Gomes, & Child, 2020), identifying barriers and enablers to the adoption and use of digital and its impact on digital transformation. This study may bring findings that can equip industry stakeholders, policymakers, and practitioners with the knowledge to make informed decisions, develop strategies, and implement initiatives that foster digital innovation, enhance competitiveness, and drive sustainable growth (Darko & Chan, 2018). A comprehensive understanding of the impact of digital transformation is crucial for maximizing the industry's potential, improving customer experiences, and positioning Ghana as a technologically advanced and competitive tourism destination. The study might highlight the need for specific digital skills within the tourism and hospitality workforce (Huang, Fisher, Ding, & Guo, 2021). This insight can guide educational institutions and training programs in equipping individuals with the necessary skills, boosting employability, and industry relevance (Brewer, 2013).

Digital transformation involves leveraging digital technologies to significantly reshape the business model of a company, products, and organizational structures to enhance routine activities, procedures, and the total value advantage offered to customers (Nadkarni & Prügl, 2021). Agbeko, Effah, and Boateng (2021), in their study identified that Information Systems (IS) scholars describe digital transformation as the cumulative changes occurring across various parts of an organization due to implementing digital solutions. The digital technology improvements have significantly enhanced the ease and cost-effectiveness of obtaining tourism and hospitality services (Mende, Scott, Doorn, Grewal, & Shanks, 2019; Gupta, 2019). The

expanded availability of online platforms and devices enables travelers to find and book services that match their preferences and budgets effortlessly (Zeqiri, Dahmani, & Youssef, 2020).

Information and Communication Technologies (ICTs) offer reliable access to information, facilitate knowledge sharing, enhance efficiency, and lower costs (García-Sánchez, García-Morales, & Bolívar-Ramos, 2017; Tong, Tak, & Wong, 2015). Online resources have transformed the convention and passing of information, making it more accessible and efficient. Given the rapid shifts in competitive trends among businesses, organizations adopting the right technologies is crucial for staying relevant and dynamic in a given sector. This trend is most apparent among SMEs in Ghana, which face rivalry from multinational business entities worldwide (Chosnie, Ocloo, Akaba, David, & Worwui-Brown, 2014).

The World Tourism Organization (WTO), a United Nations agency overseeing tourism activities, described tourism to be: “a social, cultural, and economic phenomenon involving people's movement to countries or places outside their usual environment for personal or business/professional reasons. Tourists or excursionists; residents or non-residents are referred to as visitors, and tourism refers to their activities, some of which entail tourism outings” (WTO, 2008). Hospitality entails an activity of receiving and accommodating guests and ensuring their comfort outside their usual environment. It is derived from a word in Latin "hospes" which means “a stranger or a visitor”. All economic efforts connected to travel and tourism are part of the tourism and lodging sector, underscoring its importance to many economies globally (EHL, 2023).

Activities of the Tourism and hospitality sector are key drivers in a nation's comprehensive development, making substantial contributions to its social-cultural, economic, and environmental progress (Publishers & Ampofo, 2020). Tourism has become an important

industry in many countries around the world by creating jobs and generating foreign revenue. It also helps preserve cultural and historical heritage and supports environmental conservation efforts (Eshun, Owusu, A. B., Owusu & Amankwaa, 2015). Tourism and hospitality stimulate economic growth and job creation, which contribute to preserving and promoting local cultures and traditions, which are often endangered. Tourism has long been recognized as a catalyst for enhancing regional and national development (Doe, Preko, Akroful & Okai-Anderson, 2022). International tourism is broadly recognized as a major revenue generator for countries, with both international tourist arrivals and tourism receipts playing a significant role in boosting the economy (Gyamfi, Odoom, Fosu, & Luki, 2020).

1.2 Research Problem

Various studies have been conducted internationally on digital transformation (Olbrich, 2021; Benoit, 2021) as it fundamentally changes how companies engage with customers, optimize operations in the organizations, and generate value. Accepting digital change is essential for business entities to maintain competitiveness in today's ever-changing technological environment (Zaoui & Souissi, 2020). Traditional tourism faces challenges due to technological advancements (Osei, 2022). Several studies have investigated digital transformation within the public sector in Ghana and SMEs (Anim-Yeboah, Boateng, Odoom, & Kolog, 2020; Agbeko et al., 2021; Ofosu-Ampong, 2021). Their findings show that industry stakeholders have assumed different structures of ICTs, including traditional and modern ICTs. Traditional ICTs encompass Wi-Fi, digital conferencing tools, mobile communication, fax machines, and voice mail. Modern ICTs have expanded to include mobile, cloud computing, artificial intelligence (AI), chatbots, database management, and blockchain. According to Dayour, Adongo, and Akwasi (2023), the internet, for instance, empowers informed and

demanding tourists seeking value and time efficiency. It provides instant validation of travel documents and enables bookings, catering to the needs of contemporary travelers.

Tourism quickly embraced digital transformation, leading the way with innovations such as online registration for flights and lodging. The tourism industry has continually been at the forefront in adopting the latest tools and pieces of equipment and platforms, leveraging the widespread adoption of information and communications technology (ICT) globally (WTO, 2023; Osei, Ragavan, & Mensah, 2020), offering a plethora of benefits to the world at large. Several studies have examined the impact and importance of digital integration within the tourism and hospitality sector in various nations or regions (António & Rita, 2021; Barykin, de la Poza, Khalid, Kapustina, Kalinina, & Iqbal, 2021; Mkwizu, 2019). Through heedful examination and inquiry, they aim to discover this new phenomenon's benefits, shortcomings, and consequences and provide understanding to assist companies traverse this transformative era.

Nevertheless, the limited research in this domain impedes our appreciation of its complete ability and effects on the Ghanaian industry (Alam, Ali, Erdiaw-Kwasie, Murray, & Wiesner, 2022). According to Anim-Yeboah et al. (2020), the term and concept of digital transformation have emerged relatively recently, which could cause limited study in the area.

The development of countries is significantly influenced by organizational culture, technology adoption, user perception, and institutional policies, with varying impacts depending on the country's level of development (Rahayu & Day, 2015). Considering developing countries like Ghana, these factors often pose unique challenges and demand customized plans to ensure proficient execution. Therefore, when formulating strategies and related policies for these nations, it is essential to factor in their specific contexts to promote sustainable development (Cudjoe, 2019). The studies are, hence, significant in assessing digital transformation within the tourism and hospitality industry in the Ghanaian environment.

In furtherance, most of the studies done in the past adopted theories such as affordance theory, stakeholder theory, and inductive literature review approaches with different methodologies such as case studies (Agbeko et al., 2021; Vial, 2019; Preko, Amoako, Dzogbenuku, & Kosiba, 2023). This study adopted the Critical Success Factor, which provides a new perspective of analysis that may influence the study's outcome uniquely (Collins & Stockton, 2018; Van Breda, 2018).

There is insufficient empirical research examining the digital transformation process and its outcomes within Ghana's tourism and hospitality sector. This study aims to delve deeper into understanding digital transformation's specific effects and ramifications, shedding light on its influence, challenges, and opportunities within Ghana's tourism and hospitality sector for comprehensive insights and strategic advancements.

1.3 Purpose of the Study

This research investigates how digital transformation is influencing Ghana's tourism and hospitality sector. The study aims to provide a comprehensive understanding of the current state of digital transformation in the industry, identify the enablers and challenges hindering the adoption of digital technologies, and the impact of digital technologies on digital transformation.

1.4 Research Objective

The following are the objectives for the research:

1. To determine the current state of digital transformation in Ghana's tourism and hospitality industry.
2. To explore the enablers and challenges hindering the adoption of digital technologies.

3. To assess the impact of digital technologies on digital transformation in the tourism and hospitality industry.

1.5 Research Question

The following questions were considered based on the research objectives:

1. What is the current state of digital transformation in Ghana's tourism and hospitality industry?
2. What are the enablers and challenges hindering digital technology adoption in Ghana's tourism and hospitality industry?
3. What is the impact of digital technologies on digital transformation in the tourism and hospitality industry?

1.6 Significance of the study

This research explores the role of digital transformation in shaping Ghana's tourism and hospitality sector. This research holds significant implications for research, policy, and practice in Ghana's tourism and hospitality sector.

This study contributes to existing knowledge on digital transformation in emerging economies and provides valuable insights into digitalization's current state, enablers, and challenges. It can serve as a foundation for further academic inquiry, identifying trends, and exploring innovative solutions.

The findings can inform policymakers to develop targeted strategies for fostering digitalization, enhancing competitiveness, and promoting sustainable growth. It helps assess the

effectiveness of existing initiatives and informs policy development to create an enabling environment for digital transformation.

Industry practitioners can utilize research insights to assess their digital readiness, make informed decisions on technology adoption, and enhance customer experiences. Understanding government support allows them to identify collaboration opportunities and navigate regulatory frameworks effectively.

In conclusion, this research's significance lies in its potential to contribute to knowledge, guide policymaking, and enable industry practitioners to capitalize on digital technologies for sustainable growth and competitiveness in the tourist and hospitality sector in Ghana.

1.7 Organization of the Study

The study is structured into seven (7) chapters. A brief explanation of the chapters is elaborated below:

Chapter One: The chapter on introduction presents a wide-ranging overview, detailing the background, problem statement, purpose, objectives, research questions, and significance of the research. Additionally, the introduction outlines the research structure to guide the readers. Overall, it aims to establish the study's context, underscore its significance, and set the stage for the research.

Chapter Two: The Literature Review chapter discusses relevant literature related to the study, providing the necessary background and context.

Chapter Three: The structure of the study is detailed in the chapter on the Research Framework, detailing its research design, data collection methods, instruments used, and criteria for analysis. It guides the research approach and analytical process, ensuring the study remains focused and achieves the objectives outlined for the study.

Chapter Four: The chapter methodology elucidates the plan to drive research, the underlying paradigm, and the sampling procedures employed for this research. It details the data collection instruments, methods utilized, and data handling and analysis methods. This session provides the essential foundation for the research process, ensuring a rigorous and systematic approach.

Chapter Five: This chapter on research findings focuses on the implications of digital transformation on the tourism and hospitality industry, highlighting specific cases and outcomes.

Chapter Six: The analysis and discussion chapter aims to uncover and explore the central themes emerging from the research findings. This section includes the interpretation of data to answer the research questions and provide insight into the stated objectives of the research. The discussion of the implications of the findings and their relevance to the field of tourism and hospitality is addressed in this chapter.

Chapter Seven: The research summary, conclusion, recommendations, and a short review of the main findings from the research are covered in this chapter. The implications for future research, practice, and policy, and suggestions for future studies direction are addressed in this section. This chapter wraps up the study by stressing its significance within the field and proposing areas for additional research.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Chapter Overview

The previous chapter provided an exploration of the background and definition of digital transformation and an analysis of the research problem. This exploration ultimately informed the purpose of researching the apprehension of digital transformation initiatives in the tourism and hospitality industry of Ghana. The chapter examines existing literature concerning the intersection of digital transformation within tourism and hospitality. It aims to unearth insights, analyze concepts, clarify definitions, and assess policies pertinent to this domain. By doing so, it seeks to identify research gaps, highlighting the necessity for conducting the present study. This chapter sets the stage by exploring foundational elements for understanding this field's variation and complexities.

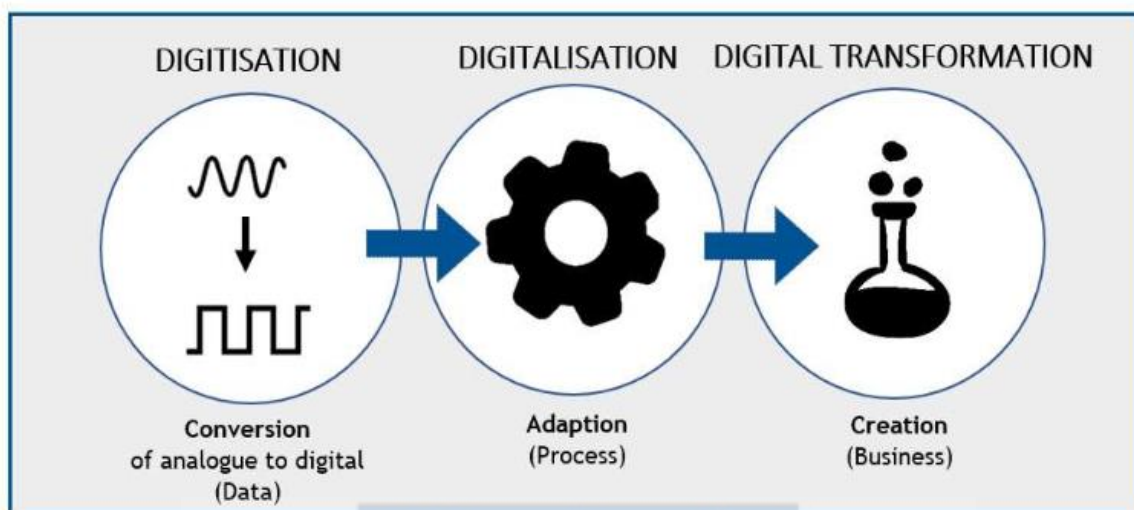
2.2 Overview of Digital Transformation

Digital transformation focuses on leveraging digital technologies to fundamentally alter how businesses are managed and enhance the value they deliver to customers (Hess, Matt, Benlian, & Wiesböck, 2016; Sesay, Ramirez, & Oh, 2017). Digital transformation involves adopting new technologies and business frameworks to optimize processes, improve client experiences, and develop new revenue streams (Fitzgerald, Kruschwitz, Bonnet, & Welch, 2014). Digital transformation encompasses process digitization, which focuses on improving ways of avoiding waste in resource use, and digital innovation, which enhances physical products integrated with digital functionalities (Berghaus & Black, 2016). It can be described as leveraging new digital technologies such as social media, mobile platforms, analytics, and integrated devices to achieve significant business enhancements including improving client

experiences, optimizing routine activities, or developing innovative business structure (Singh & Hess, 2017).

Digitization converts data to a digital format (Azim, Mat Yatin, Jensonray, & Ayub Mansor, 2018). Digitization involves transforming analog data or documents into a digital format, such as scanning a photo or converting a paper document into a PDF (Obiora, Okeke, & Onwurah, 2015; Terras, 2015). This process retains the original data without altering its content and encodes it digitally (Leonardi & Treem, 2020). Digitalization revolutionizes business operations by adapting them to the digital era. Digitalization denotes employing digital technologies to reshape business models, creating fresh avenues for generating value and revenue. It signifies the shift toward a digital-centric business (Chisita, Durodolu, & Ngoaketsi, 2021). Unlike mere digitization, digitalization goes further by harnessing digital information technology to comprehensively overhaul a company's processes, involving assessment, reengineering, and re-envisioning business methodologies (Kim, 2020). Digitalization extends beyond the mere conversion of existing data into digital formats (Hagberg, Sundstrom, & Egels-Zandén, 2016). It harnesses the power of digital technology to gather data, discern patterns, and facilitate enhanced decision-making processes within businesses (Vrana & Singh, 2021). It is illustrated in Figure 2.1

Figure 2.1: Definition of Digitisation, Digitalisation and Digital Transformation



Source: Maltaverne (2017)

Just as in other sectors, digital transformation has profoundly affected the tourism and hospitality industry. In 2016, the global digital economy was worth approximately \$11.5 trillion, accounting for 15.5% of global GDP. This figure is anticipated to reach 25% within the next decade, exceeding the growth rate of the pre-digital economy (Huawei & Oxford Economics, 2016).

Innovations, including cloud computing and big data, make it easy for tourism enterprises to analyze travelers' spatial and temporal paths and consumption patterns. This capability reduces the high costs associated with acquiring client information and enhances productivity in the tourism and hospitality sectors (Tang & Cai, 2022; Li, Xu, Tang, Wang, & Li, 2018). Research by Kumar and Shekhar (2020) in India indicates that digitalization accelerates the advancement of the tourism industry, bringing forth challenges and ample opportunities. It is anticipated to improve service delivery and ensure more satisfying experiences for tourists.

2.2.1: Types and Scope of Digital Transformation

Anim-Yeboah et al. (2020) investigated the effects of digital transformation on small and medium-sized enterprises (SMEs) in developing economies, with a focus on how it influences organizational capabilities. In the study, they identified a four-stage process that SMEs when undergoing digital transformation. The earliest stage involves initiating digital technology adoption, followed by subsequent stages focusing on changes to tasks and mechanisms. The resulting skills gap is addressed through effective management and planning, ultimately causing a shift in strategy. This underscores the importance of proactive management and strategic planning in facilitating successful digital evolution within SMEs. Westerman et al. (2014) also identified nine elements in the digital transformation process in three key areas (client experience, operations, and organizational model), similar to the findings above.

Digital transformation services refer to related activities that assist organizations in achieving their digital objectives. The McKinsey Global Institute coined the term in a report published in 2015. Digital transformation is leveraging digital technologies to create emerging enterprise frameworks, goods and services, procedures, and organizational structures to deliver increased value (Sharat, 2023). Indeed, digital transformation is multifaceted, encompassing process and organizational transformation and innovations in business models, products, and services. However, corporations often concentrate on improving processes or restructuring organizations when implementing digital transformation initiatives (Annacone, 2019). Four key types of digital transformation exist (Digital Directions Team, 2022).

Business Process Transformation: This entails utilizing technology to modernize and optimize an organization's internal processes (Müller, Mathiassen, Saunders, & Kræmmergaard, 2017). It encompasses a range of digital tools, including mobile devices, analytics, robotics, and virtual reality, among others. These technologies can deliver significant benefits including cost reduction, enhanced quality, and greater productivity. For example, adopting Robotic Process

Automation (RPA) to automate daily activities can reduce the cost of labor and enable employees of an organization to concentrate on more valuable tasks (Balasundaram & Venkatagiri, 2020; Salih Aydiner, Ortaköy, & Özsürünç, 2023). In conclusion, improving routine business activities enables companies to retain competitiveness in the modern economy.

Business Model Transformation: A fundamental change in the way a company creates, delivers, and captures value through the application of digital technology (Loebbecke & Picot, 2015; Frishammar & Parida, 2019). An example is Uber, which revolutionized the transportation industry by introducing a specialized service that connects passengers with drivers at a substantially cheaper cost than traditional taxi services. This trend prompted numerous companies like Lyft to adopt Uber's business framework. Business model transformation allows companies to differentiate themselves by offering an exclusive solution that caters to customer requirements in a novel and innovative manner.

Domain Transformation: This includes a company adopting and using modern technology to broaden its services and explore new market opportunities (Chen, Barron, Papandreou, Murphy, & Yuille, 2016). YouTube Originals exemplifies domain transformation by expanding YouTube's offerings to include original video content, positioning itself against streaming giants like Hulu and Disney+. This demonstrates how companies can utilize technology to enter new markets, extend their influence, and create additional revenue streams

Cultural/Organizational Transformation: This is vital to companies' digital transformation journey. It entails changing practices, goals, and mindsets to foster digital innovation (Arifidianto, 2023). Leaders must lead by example, and occasionally, new talent must be unearthed to align with the new shift. Cultural transformation is essential to the success of

digital transformation, allowing organizations to flourish in the constantly evolving digital outlook (Greenwood, Lindsay, King, & Loewen, 2017).

2.3 Elements of Digital Transformation

An "element" typically refers to a fundamental or essential part or component contributing to that concept's overall makeup or structure (Clark & Watson, 2016). In digital transformation, when referring to elements, it implies the crucial components or fundamental building blocks that collectively shape and drive the process of modernizing an organization through the integration of digital technologies, strategies, and approaches (Casalino, Żuchowski, Labrinos, Munoz Nieto, & Martín, 2019).

Darateja (2023) identified four elements that are evidence of digital transformation, and they are highlighted below:

a. Digital customer

A digital customer conducts online transactions, purchasing products or services through digital platforms or websites (Weber & Chatzopoulos, 2019). Digital customers leverage web, mobile, and social channels for content consumption, brand interaction, and transactions, shaping a dynamic online landscape where seamless experiences and connectivity drive engagement and commerce (Baccile, 2020). While primary engagements occur on the firm's website or app, additional channels like social media, email, and live chat also contribute to customers' online connections with the product or service (Chinn, 2023). The interaction online leads to a Digital Customer Experience. Digital customer experience encompasses all online interactions between customers and the firm's brand, product, or service. The availability of digital customers greatly impacts digital transformation.

b. Digital workspace

A digital workspace is a comprehensive technology framework that oversees and centrally manages an organization's IT assets, applications, data, and endpoints. It ensures universal access to applications across devices, regardless of on-premises or cloud hosting, enabling connectivity anytime, anywhere (Nitschke, Vallo Hult, & Bigolin, 2020). Beyond remote access, a digital workspace represents the culmination of the enterprise mobility trend. It offers IT administrators a streamlined and secure means to manage corporate resources, reflecting an evolution toward comprehensive and efficient digital experiences (Carklin, 2021).

c. Digital infrastructure and operations

The backbone of a connected business lies in its digital infrastructure. This vital framework serves as the bedrock for success, facilitating innovation, fostering evolution, and uniting individuals across the globe (Chui, Collins, & Patel, 2021). This infrastructure encompasses various elements such as connectivity, cloud services, computing capabilities, security protocols, and data storage solutions, as well as an array of Software as a Service (SaaS) and Platform as a Service (PaaS) applications, among other essential components (Malik & Om, 2018). Digital operations involve the comprehensive digitization and seamless integration of processes spanning the entirety of an organization, extending vertically from product ideation and procurement to manufacturing, logistics, and service delivery (Papazoglou & Andreou, 2019). This approach aims to harmonize and optimize every facet of the company's workflow, leveraging digital technologies to streamline operations and create a cohesive, efficient operational ecosystem (Gilchrist, 2018).

d. Digital products and services

Digital products encompass a broad spectrum of electronically deliverable information or services (González & Jouanjean, 2017). This category encompasses many offerings, from online courses, eBooks, software, and digital artwork to subscription-based services, mobile

applications, multimedia content like music and videos, and even online memberships (Li, Jain, & Kannan, 2019). The key defining factor is the ability to deliver and access these products or services digitally.

2.4 Benefits of Digital Transformations

Digital transformation affects firms' managerial and operational expertise (Heubeck, 2023; Klein, & Todesco, 2021). The global Travel & Tourism market is expected to see substantial revenue growth in the coming years. By 2024, revenue is anticipated to reach US\$916.00 billion, with an annual growth rate of 3.99%, leading to a projected market volume of US\$1,114.00 billion by 2029. The Hotels segment is the largest within the Travel & Tourism industry, with a market volume expected to reach US\$426.40 billion in 2024 (Alda, 2024). Furthermore, the process is anticipated to shift an estimated \$100 billion in value from conventional companies to emerging digital competitors, highlighting the substantial effect of digitization on the sector (Pajorska, 2022). The projections confirm that tourism and hospitality activities significantly impact economies by generating foreign income, benefiting the domestic economy, improving community standards, and preserving the environment for future generations (Barykin, de la Poza, Khalid, Kapustina, Kalinina, & Iqbal, 2021), and this achievement is attributed to digital innovation.

The estimated Proceeds from tourism and its associated activities in 2023 are projected to reach \$3 million, with an expected influx of 1.5 million tourists visiting Ghana. This marks a significant increase from 2022 when the country gained \$2.4 million in revenue from one million tourists. These figures underscore the anticipated growth in revenue and tourist numbers for the following year, highlighting the critical role of the tourism sector in Ghana's economy (MoTAC, 2023).

Digital transformation leads to high-quality user experience in other industries across the globe (Sahu, Deng, & Mollah, 2018; Abuhasan & Moreb, 2021). Emerging software, social media platforms, and applications are tailored to meet user needs, simplifying daily tasks (Batrinca & Treleaven, 2015). Processes that were once arduous and time-consuming, such as requesting wire transfers, are now streamlined and made efficient through online technologies.

It has also been discovered that the employment and use of digital technologies improve collaboration and Communication in business (Parviainen, Tihinen, Kääriäinen, & Teppola, 2017; Ehie & Chilton, 2020; Kineber, Oke, Aliu, Hamed, & Oputu, 2023). Businesses face internal communication challenges as they expand, relying on varied or no tools and often conducting operations in person, and globalization makes this approach increasingly impractical (Zaumane & Leščevica, 2023; Iltis, 2017). Digital transformation offers a solution by fostering better collaboration and communication through a unified digital platform, eliminating inefficiencies, and improving productivity, reliability, and creativity, which are essential for staying competitive in today's landscape (Zatsarinnyy & Shabanov, 2021; Damian, 2022).

Amoako and Amoah (2021) discovered that digital transformation has substantially impacted Ghana's tourism industry. They argued that integrating digital technologies in tourism has brought about operational efficiency, heightened customer satisfaction, and enriched Ghana's overall tourism experience. Through technology, businesses have streamlined processes, personalized services, and offered innovative experiences, contributing to a more seamless and satisfying interaction between tourists and the diverse offerings within the country's tourism landscape (Pajorska, 2022).

Digital transformation significantly enhances competitiveness within the service industries by optimizing operational efficiency, fostering innovation, and meeting evolving consumer

demands (Leão & da Silva, 2021; Shehadeh, Almohtaseb, Aldehayyat, & Abu-ALSondos, 2023). It enables companies to swiftly adapt to market changes, streamline processes, deliver personalized experiences, and harness data-driven insights (Aldoseri, Al-Khalifa, & Hamouda, 2023). This transformation empowers businesses to stay agile, differentiate their offerings, and maintain relevance, thereby gaining a crucial edge in a competitive marketplace (Gimpel, Hosseini, Huber, Probst, Röglinger, & Faisst, 2018).

2.5 Challenges of Digital Transformation

While digital transformation offers numerous benefits to Ghana's tourism and hospitality industry, it also presents certain challenges (Demuyakor, 2020). In Africa, including Ghana, many people lack internet access, and connectivity prices are often high for the few people who have access, with limited bandwidth available in many regions (Benoit, 2021). Limited internet access poses a significant obstacle to the digital transformation of Ghana's tourism and hospitality sector. This limitation hampers the industry's ability to leverage technological advancements fully, hindering the implementation of digital strategies and potentially impeding growth and innovation within the tourism sector.

Enhancing ICT infrastructure and integrating enhanced digital tools such as Artificial Intelligence (AI), Internet of Things (IoT), and cloud computing in Africa requires improved internet adoption through structural development, expansion based on increased demand, and reforms in data gathering and security policies (ITU, 2021; Markowitz, 2019; Sibiya, 2023). However, inadequate technological infrastructure constrains digital transformation enterprises in Ghana's public sector.

Amoako and Amoah (2021) have presumed that some Ghana tourism businesses face inadequate material and skills to adapt and holistically maximize the use of digital tools. Their position aligns with the insights from a quite recent study (Agbeko et al., 2021) regarding

digital innovation in the Ghana government's service sector, which emphasized that evaluating sector players' reactions to digital transformation initiatives is vital for achieving results in digital innovation initiatives.

New policy directions are also required for developing and enhancing tourism activities and the hospitality sector, making them more appealing to existing and prospective customers (Gyamfi, Odoom, Fosu, & Luki, 2020; Denizci Guillet, & Mohammed, 2015). These discoveries are important for exploring the digital innovation condition in the tourism and hospitality sector for an extensive awareness of the digital context in Ghana.

Kumaning and Godfred (2019) classified their findings as Institutional Challenges (Conforming to Taxation Procedures, Governmental Reforms, Legal Reforms, and Regulations), Attitudinal Challenges (Protecting Customers, Culture, and Trust), Technical Challenges (Inadequate skilled personnel, Quality, and speed of internet). These are similar to the other findings stated earlier.

This study explores the difficulties that may hinder the adoption and effective deployment of digital technologies in Ghana's tourism and hospitality industry to enhance growth and efficiency.

2.6 Enablers of Digital Transformation

Many studies have been carried out to identify the factors that enable effective digital transformation empirically. Accelerating digital transformation in African firms demands key enablers to ensure policy frameworks remain current and responsive to change (Nwaobi, 2024; Afolabi, 2023), which may apply to Ghana. A literature review by Lokuge and Duan (2023) categorized the enablers into internal factors (Organizational Strategy, Sustainable Technology Capabilities, Accessibility to Partnerships, Flexible Organizational Controls, Agile Business

Process, Organizational Culture) and external factors (Digital Technology, Digital Competition, Digital Customer Behavior).

To elaborate on the internal factors, Organizational Strategy lies at the core of the business, defining its objectives, activities, and methodologies (Jimenez, Franco, & Smith, 2021). It shapes the essence and direction of your business operations. At the same time, corporate culture reflects and influences how your organization is structured, functions, and integrates individuals and roles into your business framework (Hrebiniak, 2013). Sustainable Technology Capabilities encompass a company's proficiency in cultivating and deploying IT resources that align with existing resources, fostering adaptability, resilience, and enduring competitive advantage through continuous evolution (Inigo & Albareda, 2019). A flexible Organization and an Agile Business Process possess the agility to adjust to external shifts swiftly, securing an edge and maintaining competitiveness through adaptability, making room for introducing new technologies (Appelbaum, Calla, Desautels, & Hasan, 2017). Organizational culture can facilitate technology adoption by aligning goals, incentives, and organizational performance (Wu, Huang, Huang, & Du, 2019). The external factors involve Digital technologies, which border on electronic tools, systems, devices, and resources designed for data generation, storage, and processing purposes (Johnston, Kervin, & Wyeth, 2022; Plekhanov, Franke, & Netland, 2022), the goal of Digital Competition is to cultivate inclusive digital and competition policies, fostering swift and ethical technological progress that positively impacts all stakeholders (Mubarak & Petraite, 2020), and Digital customer behavior encompasses the actions, preferences, and interactions of consumers in the online sphere. It involves how individuals engage with digital platforms, websites, social media, apps, and other online channels when searching for information, making purchases, seeking customer support, or interacting with brands (Pogorelova, Yakhneeva, Agafonova, & Prokubovskaya, 2016).

Another study also identified Digital Data, Automation, Digital Customer Access, and Networking (Schallmo, Williams, & Boardman, 2017). So, digital transformation goes beyond adopting new technologies; it entails a structured, company-wide approach that considers both the benefits and dangers of adopting and using digital tools (Balakrishnan & Das, 2020). The approach transcends mere functional considerations and necessitates a comprehensive understanding of the potential impact the technologies can have on the business entity. In this digital dispensation, business entities need a digital innovation plan to address challenges and grab business opportunities (Singh & Hess, 2017).

2.7 Related Studies

There are several studies about digital transformation in Ghana and beyond, as captured in Table 2.1 below:



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Table 2.1: Review of Literature

No	Author	Title of paper	Research focus	Theory	Method/context	Future Research Directions
1	Agbeko et al. (2021)	Digital transformation initiative in a public sector organization: Stakeholder viewpoints and responses in Ghana.	Its focus is to understand digital transformation initiatives in the public sector from the perspectives of stakeholders' viewpoints.	Stakeholder theory	Qualitative/Ghana	Future research can look at contextual factors such as economic, cultural, and political and their mediating role in implementing e-procurement systems in the public sector.
2	Anim-Yeboah et al. (2020)	Digital transformation process and the capability and capacity implications for small	It investigates the digital transformation process concept and related capability implications for small and	None	qualitative/Ghana	Future studies could draw on multiple digital platforms, quantitative approaches, and other theories, perhaps firm growth theories.

		and medium enterprises.	medium enterprises (SMEs) in developing economies.			
3	Plekhanov et al. (2023)	Digital transformation: A review and a research agenda.	Due to the literature's accelerating scope and complexity, the study reviews and examines DT literature using a new multi-layered perspective.	None	Mixed Method	The duality of centralization tendencies in the firm caused by digital transformation should be better understood to help firms design effective organizational actions that support a smooth transition to digital value-creation methods.
4	Alam et al. (2022)	Digital transformation among SMEs: Does gender matter?	the determinants of perception of digital transformation among regional SMEs, and (ii) whether the gender of the SME owner or manager has an	The Resource-Based View	Quantitative/Australia	It may be useful in future research to apply a social constructionist perspective and critical realist ontology, enabling rich data to be collected in one-on-one interviews. A mixed-methods approach may be considered within

			impact on the drivers of the digital transformation experiences of SMEs.			the context of exploring the real reasons for the digital divide within regional communities.
5	Morakanyane et al. (2020)	Determining Digital Transformation Success Factors.	To understand what organizations, do which brings about successful digital transformation.	None	Literature Review/ Botswana	To establish relationships between the factors, empirical qualitative validation of the emergent list is needed. We also argue that the list can be adopted to construct a digital transformation success framework.
6	Nadkarni and Prügl (2021)	Digital transformation: a review, synthesis, and opportunities for future research.	The paper aims to provide a descriptive, thematic analysis of the field by critically assessing where, how, and by whom research on digital	None	Literature Review	Using the thematic map to view future research opportunities, the focus should be on the two dimensions of technology and actor. For the technology-centric dimension, we need to expand on the structural and

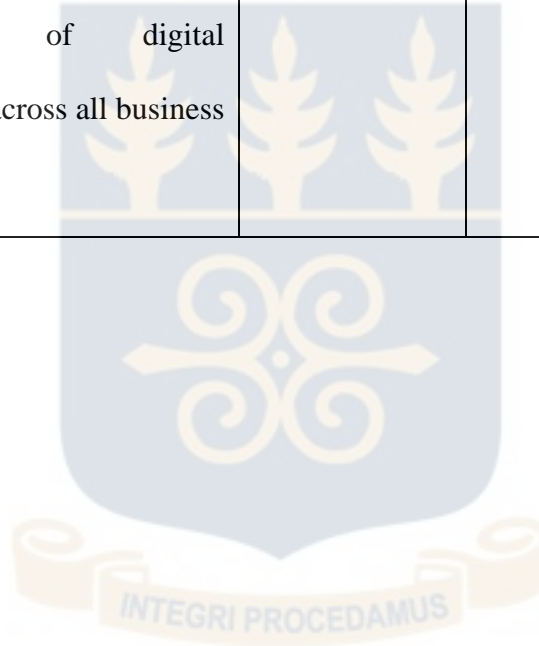
			<p>transformation is conducted.</p> <p>Based on this analysis, we identify future research opportunities.</p>			<p>operational integration of digital technologies and organizational transformation initiatives and gain a deeper understanding of the pace of technological transformation.</p>
7	Naimi-Sadigh et al. (2021)	Digital transformation in the value chain disruption of banking services.	To establish a clear process for developing and exploiting innovations through new technologies and digital approaches in the bank by implementing digital transformation.	None	Mixed Method/Iran	This research focuses on innovation and value in the bank, and the other three items (customer journey, competition, and data) still need further work and more research in the future.

8	Vial (2019)	Understanding digital transformation: A review and a research agenda.	To have a comprehensive portrait of nature and the implications of digital transformation.	None	Qualitative	Future research further explores the nature and implications of the phenomenon for organizations as well as for society.
9	Ofosu-Ampong (2021)	Determinants, barriers, and strategies of digital transformation adoption in a developing country Covid-19 era.	To examine the determinants and strategies of digital transformation adoption (DTA) in a developing country context through the lens of price value, hedonic motivation, inherent	None	Qualitative/Ghana	Future studies should include participants from public banks and other financial institutions, such as microfinance impacted by COVID-19 and experiencing a digital transformation.

			innovativeness and technology readiness.			
10	Karanasios et al. (2022)	Digital Transformation of Micro-Enterprises in Ghana.	The study focuses on micro-enterprises and how they leverage digital technology to adapt to the impacts of the pandemic.	None	Qualitative research design/ Ghana	There was no recommendation for future studies.
11	Osei (2022)	The impact of digital technologies on customer experience in experiential tourism.	The objective of this study is to look into the impact of digital technology on customer experience in tourism.	The Stimulus-Organism-Response (SOR) model	Qualitative	A quantitative study is recommended to help determine experience level through a scaled assessment to know whether some experiences have a higher impact than others.

12	Westerman et al. (2014)	The nine elements of digital transformation	To identify the elements of digital transformation.	None	Qualitative	-
13	Sesay et al. (2017)	Digital transformation in police work: A socio-material perspective on body-worn cameras (BWC).	To study BWCs from an IS perspective, using specific or complementary theories applied in IS.	Sociomaterial Approach	Qualitative	A multi-methods approach for a comprehensive study of BWCs in police organizations in the U.S. is recommended in the future.
14	Zaoui and Souissi (2020)	Roadmap for digital transformation: A literature review.	The paper aims to support companies in their digital transformation journey by initiating a reflection on digital transformation.	None	Qualitative	Using a multi-methods approach for a comprehensive study

15	Schwertner (2017)	Digital transformation of business.	The paper highlights opportunities for business transformation driven by the integration of digital technology across all business functions.	None	Qualitative	There was no recommendation for future studies.
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2.8 Chapter Summary

This chapter explores digital transformation within the tourism and hospitality sector. It also explores key elements such as the definition, scope, types, advantages, and obstacles associated with digital transformation. Furthermore, it includes a thorough review and analysis of existing studies in the field to identify current knowledge and field gaps.



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CHAPTER THREE

RESEARCH FRAMEWORK

3.1 Chapter Overview

This chapter is dedicated to laying the groundwork for investigating the impact of digital transformation on the tourism and hospitality industry. It presents the framework for conducting the study, which is rooted in the Critical Success Factor (CSF) theory. This theory is considered well-suited to realizing the objectives of the research, and a review of relevant literature on the framework is also included in this chapter.

A conceptual model-building methodology is applied in this study to investigate the relationship between digital transformation and its impact on the tourism and hospitality industry. The chapter justifies selecting the Critical Success Factor theory which is selected for the study. It presents a brief on the theory, its benefits, and its application in existing research. The session also outlines a conceptual model and closes with an overview of the essential points highlighted.

3.2 Critical Success Factor Theory – Overview

Critical Success Factor (CSF) theory is a management concept that identifies specific elements crucial for an organization to achieve its objectives (Sensuse, Qodarsih, Lusa, & Prima, 2018). When applied to information systems (IS), CSF is the key area or factor essential for successfully implementing, managing, and utilizing information technology within an organization. In 1978, Rockart introduced the concept, emphasizing that organizations must manage their Critical Success Factors to achieve success effectively. A critical success factor

(CSF) is an essential element or activity for an organization to achieve its mission or goal (Sahu, Deng, & Mollah, 2018).

The Critical Success Factor theory is one of the information systems research frameworks that helps in identifying the essential factors for success in a project or initiative (Fayaz, Kamal, & Khan, 2017). According to the theory, success hinges on a few key factors critical to the project. Effectively managing these factors ensures the project's success (Zia, 2020). In many organizations, digital transformation is approached as a structured initiative or project (Bloomberg, 2018; Henriette, Feki, & Boughzala, 2016). Applying CSF theory in information systems allows organizations to prioritize efforts, resources, and attention to the most crucial aspects necessary for successful IS implementation, ensuring that technology initiatives contribute effectively to achieving organizational goals.

The Critical Success Factor theory lacks a unified framework, leading to the adoption of various frameworks tailored to the specific studies conducted using this theory (Abu-Shanab, Abu-Shehab, & Khairallah, 2015). Critical Success Factors are identified by examining the project environment, which includes evaluating the project's desired outcomes and objectives, understanding the various players involved, and assessing the available resources. After being identified, Critical Success Factors could be employed to enhance project planning and strategic choices, ensuring the critical factors are comprehensively covered.

3.2.1 Selected Critical Success Factor Frameworks

Although theories such as the Technology-Organization-Environment (TOE) Framework, Diffusion of Innovation (DOI), and Institutional Theory are commonly applied in MIS research, their extensive use may limit the ability to generate fresh insights in certain contexts (Clarke, 2016). Therefore, this study adopts an alternative theoretical framework to explore

new perspectives and address potential gaps left by the dominant theories. Various empirical studies in Information Systems (IS) concerning Critical Success Factor theory have created diverse frameworks for comprehending digital transformation (Vial, 2019; Alreemy, Chang, Walters, & Wills, 2016). These frameworks offer structured models or methodologies that elucidate the process, elements, and strategies involved in adapting and leveraging digital technologies within organizations. This aids in conceptualizing, planning, and executing effective digital transformation initiatives (Rueckel, Muehlburger, & Koch, 2020; Imran, Shahzad, Butt, & Kantola, 2021). Some of these frameworks are identified and explained below:



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Fig. 3.1: Framework for Digital Transformation Success Factor



Source: O’Sullivan and Adam (2023)

a. Company leadership

Leadership is integral to successful digital transformation (Bachtiar, Guntoro, Riyantie, & Ridwan, 2023). McKinsey's findings underscore the importance of a leader's digital literacy in determining project success. Beyond mere technical expertise, a leader's commitment to change and adaptability amid evolving landscapes are pivotal (Matsunaga, 2024). Digital

understanding, although trainable, often necessitates recruiting industry experts (Ustundag, Cevikcan, & Karacay, 2018). Effective leadership amalgamates digital proficiency with a resolute commitment to transformation, fostering adaptability. Such leaders drive organizational change, steering initiatives toward success in the dynamic realm of digital evolution (Alajaji, 2023).

b. Smart tools

Transitioning from manual methods to digital tools significantly enhances business operational efficiency (Gao, Yan, Zhou, & Mo, 2023). However, choosing the right software is critical; ineffective implementation could delay desired outcomes. Understanding which tools align with specific business processes is paramount (Adanna & Nonyelum, 2020; Mugassa & Frumence, 2020). Communication platforms streamline remote team coordination, while content management systems (CMS) simplify media handling and distribution across diverse channels (Obrenovic, Du, Godinic, Tsoy, Khan, & Jakhongirov, 2020). Embracing voice-over-internet protocol (VoIP) technology, especially for sales or support reliant on phone lines, offers expanded features and flexibility, often at a better value than traditional systems (Carroll, 2018). Cloud-hosted VoIP, leveraging broadband over landlines, presents numerous advantages. Despite unclear telephony pricing, utilizing comparison tools can assist in obtaining tailored quotes (Szinay, Jones, Chadborn, Brown, & Naughton, 2020).

c. Data-driven insights

Utilizing innovative technologies to streamline core business processes is a significant step forward (Kafi & Adnan, 2022). Integrating these tools within a broader data-driven approach is recommended to maximize success. Harnessing intelligent insights from data empowers businesses to understand better their market and customer needs (Allioui & Mourdi, 2023). Implementing changes based on these insights significantly enhances customer experiences,

leading to increased profitability. Workforce reports highlight that advanced reporting saves costs and substantially boosts profit margins by replacing guesswork with informed decision-making (Samuelson, Marks, & Zagorsky, 2021; Porter & Norton, 2016). Fortunately, implementing this approach does not always require substantial investments. Several free services, such as Google Analytics, Open Web Analytics, and Smartlook, offer robust tools to track customer behavior and derive valuable insights (Varlese, Misso, Koliouka, & Andreopoulou, 2020; Parvinzmir, 2018).

d. Digital upskilling

Improving workers' digital competencies is pivotal for effective business transformation (Varshney, 2020; Schwertner, 2017). Redefining roles, offering training on tools, and educating on digital strategies help bridge skill gaps. Hiring specialists further bolsters technical expertise (Kolding, Sundblad, Alexa, Stone, Aravopoulou, & Evans, 2018; Laundon, McDonald, & Greentree, 2023). The impact of digital upskilling is substantial: 66% of employers see ROI within a year, while PwC notes that 93% of CEOs witness boosted productivity, staff retention, and workforce resilience through such programs (O'Sullivan & Adam, 2023). Investing in workforce digital proficiency is a strategic move yielding significant organizational benefits in the fast-evolving digital landscape (Trenerry, Chng, Wang, Suhaila, Lim, Lu, & Oh, 2021).

e. Building a digital-first culture

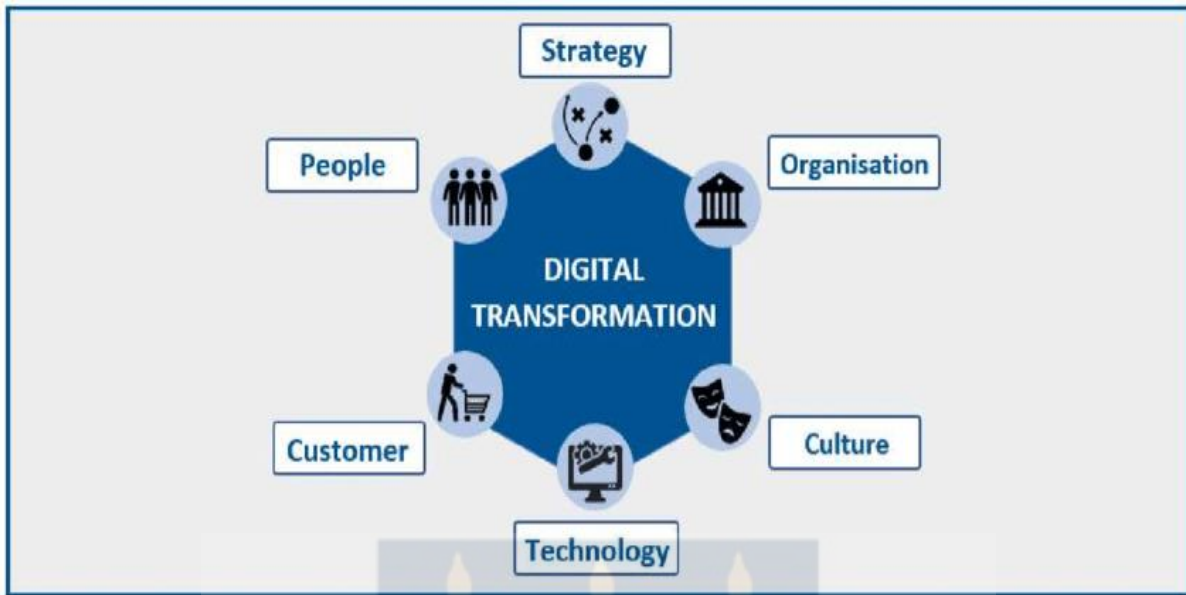
Implementing a series of technology-driven initiatives would not stick if the organization's culture is still in the past. Therefore, for a digital transformation to succeed, it must deeply influence your company's culture (Oliveira, Zancul, & Salerno, 2024). While this may sound daunting, some smaller steps can be taken to build a digital-first culture. Training the workers to adopt new behaviors and mindsets allows you to introduce new thinking methods from the

ground up (Laundon, McDonald, & Greentree, 2023). Research from McKinsey indicates that nearly 30% of companies that have successfully undergone digital transformations have adopted this approach. Besides investing in training and development, fostering a culture of transparency, innovation, and experimentation is essential for aligning your company's values with its evolving needs (Kohnke, 2017). These do not all need to be implemented from the top down. By assigning roles to employees to enforce change, the company stand the chance of moving forward as a unit (Purcell, 2014).

3.2.1.1 Weaknesses of the Framework

The framework for digital transformation outlined presents certain drawbacks. It excessively emphasizes leadership, potentially sidelining the significance of collective engagement across the organization (Cooper, 2017; Crawford, 2019). This top-down approach might alienate employees and hinder their involvement in the transformation process. Moreover, the comprehensive strategies suggested within the framework could demand substantial resources, posing challenges for smaller businesses with limited budgets in prioritization and allocation (van Dam, Verboon, & Tekleab, 2021; Hanna, 2020). Additionally, while the framework acknowledges the importance of fostering a digital-first culture, its suggestions for cultural change, like training, may oversimplify the intricate nature of cultural shifts (Patel, 2017). Addressing deeply ingrained cultural barriers or resistance to change requires a more refined, time-intensive approach beyond mere training initiatives (Mette, Nieuwenhuizen, & Hvidston, 2016; Rosenbloom, Markard, Geels, & Fuenfschilling, 2020).

Fig. 3.2 Digital Transformation Framework



Source: Bumann and Peter (2019)

a. Strategy

The literature presents varied perspectives on digital strategy for successful transformation. Scholars debate between aligning IT strategy with business strategy, fusing IT and business strategy, or advocating for a separate overarching digital transformation strategy (Brown & Brown, 2019; Haffke, 2017). Consensus emphasizes a well-documented, communicated, and regularly updated digital strategy despite these differences. Management's role involves communicating the vision, providing implementation support, and actively exploring new trends to identify business opportunities (Jamali, El Dirani, & Harwood, 2015; Charoensukmongkol & Sasatanun, 2017).

b. Organisation

The organizational dimension in digital transformation emphasizes partnerships, ecosystems, and agility. Encouraging collaborative partnerships with stakeholders while retaining control over customer relationships is crucial (Warner & Wäger, 2019; Spagnoletti, Kazemargi, & Prencipe, 2021). Organizations should embrace agile, flatter structures, enabling quick

responses to market changes (Arokodare & Falana, 2021). Roles like Chief Digital Officer and cross-functional collaboration enhance transformation (Firk, Hanelt, Oehmichen, & Wolff, 2021). Creating innovative units like digital factories accelerates product development and integration, closely tied to fostering a culture conducive to change (Kruft & Gamber, 2021).

c. Culture

Corporate culture is integral for digital transformation, involving a "passionate pioneer culture" enabling decentralized idea exploration (Hanelt, Bohnsack, Marz, & Antunes Marante, 2021). Digitally maturing firms exhibit traits like experimentation, risk acceptance, and valuing soft skills in leaders. Cultivating a "fail forward culture" demands commitment from top executives (Bumann & Peter, 2019; Congdon, 2020). Successful digital leaders need not be tech experts but must foster innovative cultures despite risks.

d. Technology

The technology dimension in digital transformation involves adopting emerging technologies like AI, IoT, and blockchain. Organizations should embrace collaborative, flexible approaches, leveraging modern architectures like cloud and APIs for agility (Hubert, Elisha, & Kaledio, 2023). Legacy IT systems pose challenges hindering innovation and agility. Some firms focus on superficial changes, while others address core digitization. Cybersecurity is vital; strict adherence to rules and testing for threat scenarios ensure data availability (Muhammad, Munir, Munir, & Zafar, 2022).

e. Customer

Organizations adapt to changing customer behavior by integrating seamless hybrid interaction channels, catering to digital and physical touchpoints (Gasser, Nüesch, Puschmann, Berghaus, & Peter, 2017). Emphasizing consistent, well-designed customer experiences across digital and non-digital channels is crucial. While many firms focus on digitizing existing products,

harnessing digital tech for data collection aids in predicting behavior for personalized services (Anderson, Gimpel, Schumacher, Von Leipzig, 2018). Customers now expect proactive anticipation of their needs, encouraging customer involvement in product innovation (Ehlerding, William, 2018).

f. People

The people dimension in digital transformation focuses on evolving employee skills to bridge the growing gap in the VUCA world (Zhang-Zhang, Rohlfer, & Varma, 2022). The World Economic Forum highlights the increasing demand for cognitive, systems, and problem-solving abilities (Astuti, Rusilowati, & Subali, 2021). Organizations must initiate comprehensive training programs, embracing varied approaches like boot camps, hackathons, and collaborations for talent access (Heller, Amir, Waxman, & Maaravi, 2023). Providing resources for skill development is crucial, with digitally maturing firms emphasizing talent training (Kaliannan, Darmalinggam, Dorasamy, & Abraham, 2023). Creating flexible workplaces with options like remote work and digital spaces attracts tech-savvy talent (Rishi, Breslau, & Miscovich, 2021).

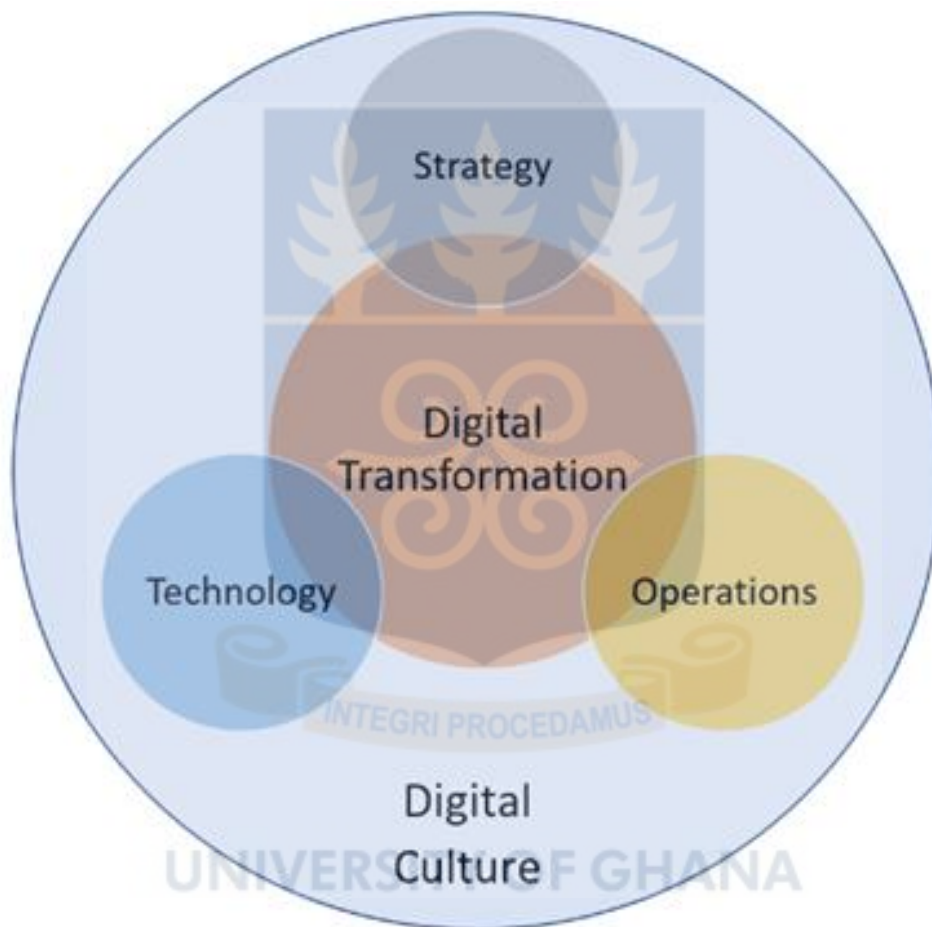
3.2.1.2 Weaknesses of the Framework

The framework for digital transformation, despite its comprehensive nature, faces drawbacks. It risks promoting a siloed approach by focusing on separate dimensions rather than holistic integration, hindering interconnected strategies (Therrien, Usher, & Matyas, 2020). Implementing all facets might overwhelm and strain resources, leading to incomplete transformations (Walsh, 2020). Additionally, its lack of flexibility may hinder adaptation to evolving contexts, potentially making it ineffective in addressing emerging challenges or technology shifts (Eggers & Park, 2018). The framework exhibits redundancy concerning

people, customers, and culture. This duplication warrants a thorough review to streamline and harmonize these vital elements, ensuring optimal integration and synergy within the framework's structure (Pirozzi & Ferulano, 2016).

The framework below is chosen for the study:

Fig. 3.3 Digital Transformation Success Factor Framework



Source: Sukanya (2022)

The framework revolves around Digital Transformation, which is shaped by Strategy, Operations, and Technology, all of which are integrated into Digital Culture (Rowles & Brown, 2017; Faro, Abedin, & Cetindamar, 2022; Nadkarni & Prügl, 2021). This digital transformation framework offers a holistic integration of critical elements of strategy, operations, technology, and digital culture, which are essential for digital transformation

success (Ivančić, Vukšić, & Spremić, 2019). Unlike isolated approaches, it emphasizes interconnectedness among digital culture, technology adoption, operations, and strategic alignment. Recognizing these interdependencies fosters a balanced strategy (Albert, Kreutzer, & Lechner, 2015). This evidence-based model gains credibility by aligning with industry best practices through empirical and scholarly validation (Brink, Palmer, & Costigan, 2018). It focuses on enabling factors, fostering digital culture, aligning strategies, ensuring operational compatibility, and prudent technology adoption to drive organizational change (Kafi & Adnan, 2022; Olugboyega, 2022). By highlighting these factors, it aids in identifying actionable steps, ensuring coherence in transformation efforts, and providing practical relevance for organizations pursuing digital transformation (Bellantuono, Nuzzi, Pontrandolfo, & Scozzi, 2021; Stewart, 2023).

3.2.2 Justification for Choosing the Critical Success Factor Theory

The common belief is that digital innovation immediately translates into profit and a competitive company advantage. BCG's recent study of 850 global companies reveals a contrasting perspective. Findings from the study show that in 2021, only 35% of these companies successfully achieved their digital transformation agenda. This shows a marginal gain of five percentage points compared to the numbers from the 2020 assessment (Boston Consulting Group, December 2022). Digital transformation extends further to technology adoption and utilization; it encompasses alignment with various other factors (Vogelsang, Liere-netheler, Packmohr, Hoppe, 2019). These elements can be identified as critical success factors.

Digital transformation is characterized as a complicated, costly, and dynamic undertaking where organizations take risks to achieve significant long-term gains in efficiency and

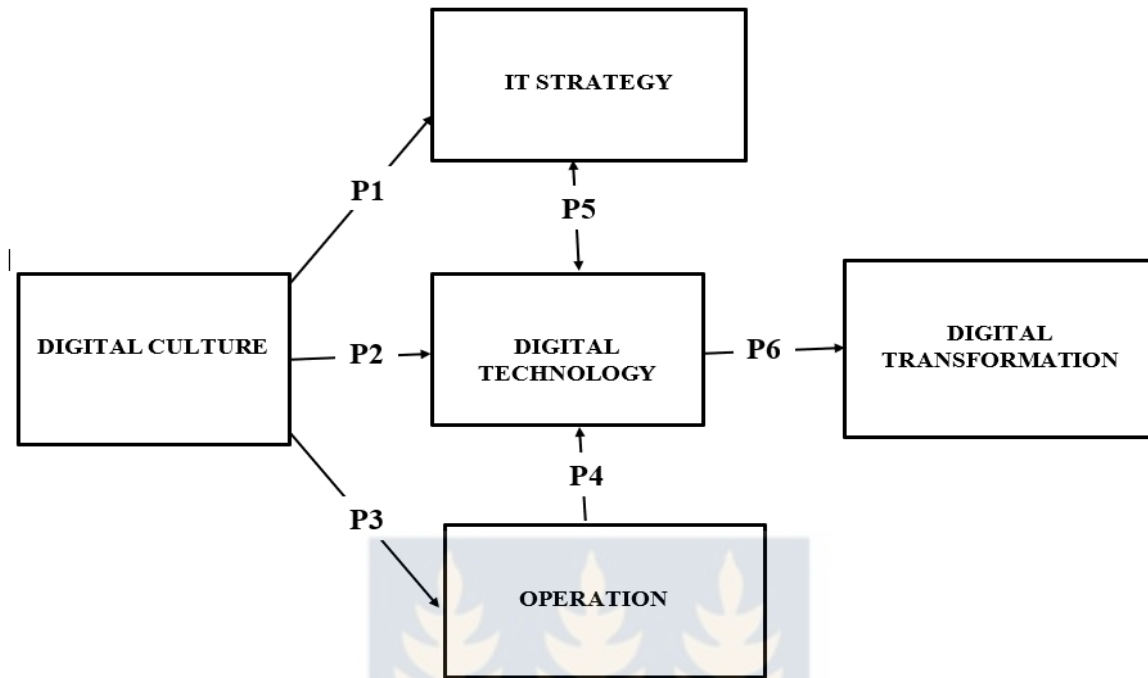
productivity. Therefore, ensuring the success of these initiatives is crucial (Morakanyane, Reilly, & Mcavoy, 2020). Some organizations face difficulties adopting new technologies (Karanasios & Senyo, 2022). In a digital world, organizational competitiveness relies on more than just technology. It requires solving a complex puzzle encompassing various factors beyond technology alone, as indicated by prior research on IT-enabled transformation (Vial, 2019). Successful digital transformation hinges on clearly defining the motivations driving change, identifying the areas within their operations ripe for transformation, selecting appropriate technologies to facilitate this evolution, and setting clear, measurable goals for the outcomes they seek to achieve (Morakanyane et al., 2020).

In our jurisdiction, where digital transformation is still emerging, the Critical Success Factor theory is deemed the most suitable based on existing research (Ahimbisibwe, Cavana, & Daellenbach, 2015). The Critical Success Factor theory aids in pinpointing the essential elements required to successfully implement digital transformation initiatives (Barth & Koch, 2019).

3.3 Research/Conceptual Framework based on Critical Success Factor Theory (CSF)

Figure 3.4 Conceptual Framework

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Source: By the Author

3.4 Postulations Development

3.4.1 Digital Culture

A digital culture within an organization refers to a collection of behaviours and practices that leverage the potential of new technologies to drive value for customers, employees, and shareholders (Leal-Rodríguez, Sanchís-Pedregosa, Moreno-Moreno, & Leal-Millán, 2023). A digital culture within a workplace is a dynamic environment moulded and propelled by integrating digital tools and technologies (Junaedi, Renaldo, Yovita, Veronica, & Sudarno, 2023). In organizations fostering advanced digital cultures, the majority of employees leverage these technological resources to collaboratively drive innovation and provide customers seamless access to a wide array of products, services, and support (Martínez-Peláez, Ochoa-Brust, Rivera, Félix, Ostos, Brito, & Mena, 2023). It is a crucial aspect of digital transformation, fostering an environment that promotes risk-taking, innovation, and collaboration (Schwertner, 2017). By embracing a digital culture, companies can reshape their

business and organizational models to adapt to the digital landscape and capitalize on emerging opportunities (Goran, LaBerge, & Srinivasan, 2017). Digital cultures prioritize data collection and analysis (Gennaro & Miller, 2021). This emphasis on data-driven insights empowers organizations to make informed decisions backed by real-time data, predictive analytics, and market trends, reducing risks and increasing the likelihood of successful outcomes (Ruthven & Chowdhury, 2015). This cultural shift empowers organizations to harness the benefits of technology and effectively navigate the challenges of the digital era (Ochoa, 2016; Trushkina, Abazov, Rynkevych, & Bakhautdinova, 2020; Kane, Palmer, & Phillips, 2017). Embracing a digital culture equips organizations with a competitive edge, enabling them to navigate complexities and capitalize on opportunities in today's fast-paced business environment.

3.4.2 Digital Culture and IT Strategy

Digital culture profoundly shapes strategy by fostering agility, customer-centricity, and technological integration (Bozkus, 2023). Encouraging a proactive stance toward technological evolution enables swift adaptation to emerging tools and methodologies that align with organizational objectives (Pargaonkar, 2023). Prioritizing customer-centric solutions influences IT strategies to develop intuitive, personalized technologies, enhancing user experiences and customer connections (da Silva Fernandes, 2022; Järveläinen, 2019). Technology integration into strategic planning empowers IT to align with broader business goals, leveraging digital tools for competitive advantage (Allioui & Mourdi, 2023; Ismail, Khater, & Zaki, 2017). Additionally, digital cultures foster an agile mindset, enabling IT departments to embrace experimentation and iterative development, ensuring strategies remain adaptable and responsive (Bresciani, Ferraris, Romano, & Santoro, 2021; Lindgren & Oskarsson, 2023). These influences illustrate how digital culture significantly shapes IT

strategy, promoting adaptability, customer focus, strategic alignment, and an agile approach to technology implementation.

P1: Digital Culture may influence IT Strategy adoption

3.4.3 Digital Culture and Digital Technology

Digital culture and technology adoption have fundamentally reshaped society across communication, information access, economy, and cultural norms (Srinivasan, 2018; Giacosa, Culasso, & Crocco, 2022). Communication has evolved, fostering global connections through social media and messaging apps (Swart, Peters, & Broersma, 2018; Ewing, Men, & O'Neil, 2019). The internet's democratization of information has revolutionized knowledge access and sharing, impacting education and public discourse and raising concerns about misinformation (Persily, 2019). The digital economy's emergence, driven by e-commerce, remote work, and digital payments, has disrupted industries, generated new job opportunities, and altered consumer behavior (Abi Fadel, 2021). Culturally, digital entertainment platforms like streaming services and online gaming have revolutionized media consumption, influencing societal values and transforming leisure activities (Tobon, Ruiz-Alba, & García-Madariaga, 2020). These influences underscore a transformative shift in how people connect, access information, conduct business, and perceive the world, shaping modern lifestyles and interactions (Purnama & Asdlori, 2023).

P2: Digital culture may influence the adoption of digital technologies

3.4.4 Digital Culture and Operation

A robust digital culture profoundly impacts operations by fostering innovation, enhancing collaboration, promoting data-driven decision-making, and empowering employees (Deep, 2023; Troisi, Maione, Grimaldi, & Loia, 2020). It cultivates an environment conducive to innovation and agility, enabling rapid experimentation and adaptation to market changes. This culture encourages seamless team collaboration, leveraging digital tools to streamline workflows and expedite decision-making (Aithal, 2023; Shaieb & El-Rahman, 2022). Prioritizing data collection and analysis drives informed operational decisions, optimizing processes, and identifying areas for improvement. In addition, a strong digital culture empowers employees, promoting adaptability to emerging technologies and fostering continuous learning, ensuring operational alignment with evolving advancements. These influences collectively showcase how digital culture shapes operations, driving efficiency, competitiveness, and the capacity for organizational evolution.

P3: Digital Culture may influence operations

3.4.5 Operation

Operational compatibility has always influenced technology adoption (Taherdoost, 2018). The results from a study demonstrate a notable impact of technology-based service innovativeness on Preko, Amoako, Dzogbenuku, and Kosiba (2023) service value, tourist site revisits, and experience sharing through technology, highlighting the crucial role of operations in this relationship. The findings also indicate a significant influence of service value on tourist site revisits and experience-sharing through technology shaped by operational practices. The relevance of the technology to the service cannot be overemphasized (Yoon, Ghosh, & Jeong, 2014).

That said, the technology to be adopted must be compatible with existing legacy systems. New technology should seamlessly integrate with current systems to ensure a smooth transition without disrupting ongoing operations (Zhao & Zhou, 2014). Incompatibility might lead to data silos, inefficiencies, or even system failures (Mathew & Pillai, 2015). The technology adopted should be scalable to accommodate business growth and flexible enough to adapt to changing needs (Kumar, 2023). If the system lacks scalability or flexibility, it might become obsolete quickly or require frequent, costly upgrades (Levandowski, Jiao, & Johannesson, 2015). Managers must ensure that the new technology complies with industry standards, regulations, and data protection laws, which is critical (Novkovic & Korkut, 2017). Incompatibility in meeting security standards can lead to vulnerabilities, data breaches, or non-compliance issues, posing significant organizational risks (Gozman & Willcocks, 2019). Addressing these operational compatibility issues before adopting new technology helps mitigate risks, enhances successful implementation, and ensures the technology aligns with the organization's goals and operational requirements (Tupa, Simota, & Steiner, 2017).

Implementing suitable technologies is, therefore, imperative for enhancing client service in tourism and hospitality (Naimi-Sadigh, Asgari, & Rabiei, 2021). These technologies should optimize daily operations, ensuring effectiveness and efficiency. By integrating these tools, the firm can streamline tasks, improve service delivery, and cater to clients more effectively, ultimately bolstering their overall performance in the industry (Ofosu-Ampong, 2021).

P4: Operations may influence Digital Technology adoption,

3.4.6 IT Strategy

An IT or digital strategy adapts to market shifts by harnessing user-friendly technology, creating distinct advantages and solutions (Sakas, Vlachos, & Nasiopoulos, 2014). It aims to

align business goals with powerful, accessible technologies, fostering unique capabilities (Naimi-Sadigh, Asgari, & Rabiei, 2021). Strategic capabilities serve as a mediator in the relationship between technology-based strategy and a firm's performance. This highlights the significance of a technology-based strategy as a successful founding strategy, as it can greatly influence firm performance through strategic capabilities (Hao & Song, 2016). Business and IT executives prioritize strategic alignment as a key focus area for their organizations (Wu, Straub, & Liang, 2015). A study by Alreemy, Chang, Walters, and Wills (2016) revealed strategic alignment as the number one critical success factor (CSF) for information technology governance.

To harness the full benefit of digital transformation, IT strategies must align with the overarching business objectives and goals (Ritala, Baiyere, Hughes, & Kraus, 2021). This can be achieved by understanding the core business strategies essential to tailor IT initiatives that directly support and contribute to achieving these objectives (Canhoto, Quinton, Pera, Molinillo, & Simkin, 2021). Lack of alignment can result in IT projects that do not effectively serve the organization's mission. There is also a need for strong communication between IT and business stakeholders, which is crucial (Kiron, Kane, Palmer, Phillips, & Buckley, 2016). Both sides must collaborate closely to comprehend each other's perspectives, needs, and constraints. Failure to communicate effectively can lead to misunderstandings, misalignment, or the development of IT solutions that do not address the business's challenges (Piorkowski, Park, Wang, Wang, Muller, & Portnoy, 2021). It is crucial to establish key performance indicators (KPIs) and metrics to evaluate the success of IT initiatives in achieving strategic goals (Haddadi & Yaghoobi, 2014). Without proper measurement and evaluation mechanisms, assessing whether IT efforts effectively support the overall business strategy (Hristov & Chirico, 2019) is challenging.

Companies face numerous challenges in digital transformation; therefore, they acknowledge the necessity of governing this intricate process (Brunetti, Matt, Bonfanti, De Longhi, Pedrini, & Orzes, 2020). They understand the importance of crafting and implementing a coherent strategy to effectively navigate and adapt to the evolving digital landscape (Jöhnk, 2020). This is best achieved by blending Business Strategy, Functional Strategy, and Transformation Strategy (Ismail, Khater, & Zaki, 2017).

Finally, a business strategy may lead to adopting new digital technology, which may also lead to a new strategy (Van Zeebroeck, Kretschmer, & Bughin, 2021). The arrow pointing to both contracts represents this relationship. The relationship between business strategy and technology is symbiotic (Coccia & Watts, 2020; Taddeo, Simboli, Ioppolo, & Morgante, 2017). Business strategy often guides technology adoption, driven by objectives like global expansion using digital tools, gaining a competitive edge through automation, or meeting evolving customer demands such as mobile apps for shopping (Andriole, Cox, & Khin, 2017). Conversely, new technology sparks innovative strategies by offering opportunities for innovation, transforming industries (like streaming services in entertainment), and enabling capabilities like data analytics for informed decision-making and personalized experiences (Hou *et al.*, 2020). This mutual influence results in a continuous interplay: strategic decisions shape technology choices for business goals, while technological advancements inspire new strategies or necessitate adaptations for competitiveness (Pisano, 2015; Ismail, Khater, & Zaki, 2017). Successful organizations recognize this synergy, continually assessing how each aspect can bolster the other for ongoing growth and adaptability in a dynamic marketplace (Wu, Straub, & Liang, 2015; Garrido-Moreno, Lockett, & García-Morales, 2014; Bauer & Matzler, 2014).

P5: IT Strategy ↔ Digital Technology

3.4.7 Digital Technology and Digital Transformation

Digital technologies encompass tools, systems, and devices capable of generating, storing, and processing data, and their data processing and logic capabilities stem from micro processes programmed to perform diverse functions (Johnston, Kervin, & Wyeth, 2022). Digital technologies enable immersive virtual reality experiences, allowing the creation of simulated fictional worlds for human engagement (Levitskaya & Straka, 2021). Digital technology adoption leads to digital transformation (Verhoef, Broekhuizen, Bart, Bhattacharya, Dong, Fabian, & Haenlein, 2021).

Businesses consider many factors when choosing a particular technology. They prioritize technologies that enhance the customer experience. The digital tools should align with your target audience's needs and preferences (Hoyer, WKroschke, Schmitt, Kraume, & Shankar, 2020). Consider solutions that enable personalized interactions, streamlined service delivery, and convenient customer access, thereby improving satisfaction and loyalty (Huseynov, 2023). Protecting sensitive customer information is also paramount in choosing a new technology for service-oriented businesses (Shukla & Sharma, 2024). Choosing technologies that are user-friendly and easy for employees to adopt is pivotal. The usability of these tools is crucial as it affects employee productivity and acceptance (Na, Heo, Han, Shin, & Roh, 2022). It is also recommended that intuitive interfaces and adequate training be provided to ensure smoother integration into daily operations, minimizing resistance to change and maximizing the technology's benefits (Weng, 2023). Some firms assess the total cost of ownership, including initial investment, maintenance, and training expenses, against the expected ROI (Rosati & Lynn, 2020). They finally select technologies that balance cost and value, focusing on solutions that deliver tangible benefits and a positive impact on the bottom line over the long

term (Lizot, Trojan, & Afonso, 2021). By considering these factors, prioritizing customer-centric solutions, ROI, and emphasizing data service-oriented businesses can make informed decisions when adopting digital technologies (Coba, Boucher, Lamy, Vuillaume, & Gay, 2024). These choices facilitate improved service delivery, enhanced customer experiences, and sustainable growth in an increasingly digital landscape.

P6: Technology adoption may lead to Digital Transformation

3.4.8 Digital Transformation

The framework of Digital Transformation consists of four primary constructs: technology, operations, strategy, and digital culture (Ross, Beath, & Quaadgras, 2018; Berman & Marshall, 2016; Westerman, Bonnet, & McAfee, 2019; Goh, 2021). The IT strategy covers formulating a plan to leverage digital innovations to fulfill business targets. At the same time, operations focus on modifying business processes to harness digital technologies, thereby enhancing efficiency and customer experience (Berman & Marshall, 2016). Digital technology encompasses selecting, implementing, and integrating digital solutions and platforms. Meanwhile, digital culture involves cultivating an organizational culture and mindset that welcomes change and innovation and actively adopts digital technologies (Ross, Beath, & Quaadgras, 2018; Westerman, Bonnet, & McAfee, 2019; Goh, 2021). For a successful digital transformation, all four constructs, IT strategy, operations, digital technology, and digital culture, must work together in a coordinated manner (Westerman, Bonnet, & McAfee, 2019; Goh, 2021).

Digital transformation involves a strategic alignment between technology and organizational activities to champion innovation, enhance efficiency, and secure a competitive edge (Naimi-Sadigh, Asgari & Rabiei, 2021). This imperative process demands a comprehensive

perspective, entwining strategy, operations, and technology to fulfill business goals and stay pertinent in an ever-evolving digital sphere (Allioui & Mourdi, 2023; Stroup, 2014). It necessitates cohesive alignment across these facets, perfectly adapting to technological advancements, fostering innovation, streamlining operations, and ensuring sustained relevance and competitiveness amid dynamic market dynamics (Roslan & Ahmad, 2023).

Lokuge & Duan (2023) study highlighted Culture, Strategy, and Digital Technologies as pivotal enablers of successful digital transformation. Culture shapes the organization's mindset toward change, while Strategy delineates the roadmap for implementation. Leveraging Digital Technologies facilitates the execution of innovative solutions, which positively influences firm operations. These factors synergistically fortify the adopted framework, fostering a conducive environment for comprehensive and sustainable digital transformation within organizations.

3.5 Chapter Summary

The chapter explained the Critical Success Factor (CSF) theory's application within information systems, offering insights into its constructs and accompanying diagrams. It introduced a meticulously designed framework tailored to address the research inquiries and fulfill its overarching purpose and objectives. Within this framework, research propositions were meticulously formulated to guide the investigative process, establishing a structured approach to examine the interplay between CSF information systems and achieving success within the study context. This groundwork ensures a comprehensive and methodical exploration aligned with the research's goals and aspirations.

CHAPTER FOUR

METHODOLOGY

4.1 Chapter Overview

The previous chapter covered and presented the framework for the research, offering a comprehensive overview of the foundational structure guiding the study. This section provides an in-depth discussion of the research methodology employed in this study including Research Paradigm, Research Design and Methodology, and Research.

4.2 Research Paradigm

Paradigms, or philosophical assumptions, are essential for conducting well-grounded research as they form the foundational framework guiding the design and implementation of the study (Eriksson & Kovalainen, 2015; Kivunja, 2018). Paradigms clearly define the research scope and guide the methodology used to study the subject matter. They shape both the research focus and the approach to investigation.

The table below illustrates the various forms of research paradigms:

Table 4.1 Differing paradigms

Differing paradigms in energy social science research.

	Positivism	Interpretivism	Critical realism
<i>Ontology</i>	Independent and objective reality	Socially constructed reality	Objective, stratified reality consisting of surface-level events

	Positivism	Interpretivism	Critical realism
	Causality is indicated by constant conjunctions of empirical events	Multiple realities possible	Real entities with particular structures and causal properties
Epistemology	Knowledge generated by discovering general laws and relationships that have predictive power	Knowledge is generated by interpreting subjects' subjective meanings and actions according to their frame of reference.	Knowledge generated by “retroduction” creates theories about the entities, structures, and causal mechanisms that combine to generate observable events.
	Emphasis on prediction	Emphasis on interpretation	Emphasis on explanation
	Specific, deductive hypothesis-testing	Exploratory, inductive, theory-generating	No preference for a particular method depends
Methodology	Emphasis on generalizability	Emphasis on depth rather than generalizability	Emphasis on the research question and the nature of the relevant entities and causal mechanisms. Mixed methods encouraged
	Quantitative methods, such as experiments, surveys, and statistical analysis of secondary data	Qualitative methods, such as ethnographies and case studies	

Source: Adopted from Sovacool, Axsen, and Sorrell (2018)

The interpretivism paradigm was chosen for the study. The interpretivism paradigm is often considered suitable for exploratory research. Interpretivism emphasizes understanding and interpreting social phenomena from the individuals' perspectives, focusing on subjective meanings and experiences (Kivunja & Kuyini, 2017). This aligns well with exploratory research goals, which aim to gain a deeper understanding of a topic or phenomenon and generate initial insights. By adopting an interpretive lens, researchers can explore the complexities and nuances of the subject matter, uncovering underlying meanings and social constructions to establish patterns (Boateng, 2020). This allows for a rich and contextual exploration, often valuable in exploratory research.

4.3 Research Design and Methodology

Research design is the plan for conducting a research study (Du Toit, 2014). This involves a decision regarding the study's purpose, the chosen research methods, the data collection process and analysis techniques to be employed, and the intended audience (Fusch Ph D & Ness, 2015). The research design plays a vital role in establishing the quality and validity of the study (Chew, 2019). Various research methods can produce different levels of findings, including quantitative, qualitative, and mixed approaches.

While qualitative research outcomes may be perceived as less objective and generalizable than quantitative research, they offer clear advantages regarding depth, contextuality, and hypothesis generation (Tracy, 2019).

4.3.1 Exploratory Research Method

The study adopts an exploratory approach. Exploratory research is commonly recognized as a qualitative approach (Casula, Rangarajan, & Shields, 2021). Exploratory research is a broad strategy that is aimed at investigating a topic or phenomenon that has been relatively unexplored or lacks substantial prior research (Thomas & Lawal, 2020). It is intended to understand the subject better and generate initial insight. Exploratory research typically involves gathering data from various sources, such as interviews, observations, or existing literature, and it often utilizes qualitative methods (Singh, 2021). Its main purpose is to provide a foundation for further investigation or more focused research.

Overall, exploratory research offers researchers the flexibility to explore and understand complex phenomena and provides a solid foundation for further research (Ponelis, 2015). Its qualitative nature allows for a deeper and context-specific understanding, making it a valuable method in the early stages of investigation or when studying under-explored topics such as digital transformation in Ghana's tourism and hospitality industry (Jebb, Parrigon, & Woo, 2017).

4.3.2 Exploratory Design

An exploratory design is conducted about a research problem when there are few or no earlier studies to refer to or rely upon to predict an outcome, offering a preliminary understanding without preconceived hypotheses, aiding in forming insights or refining research questions (Hadar, Soffer, & Kenzi, 2014). Exploratory research questions unravel insights about a specific area of interest, fostering connections between ideas while avoiding preconceived notions and allowing for unbiased foundational analysis and understanding (Skinner, Edwards, & Corbett, 2014). An exploratory design was used, which allows for the exploration of

experiences and is used to evaluate people's expectations and experiences (AbuAlRub, El-Jardali, Jamal, Iblasi, & Murray, 2013)

4.4 Sampling Techniques

The study adopted a convenient and judgmental (purposive) sampling method, a non-probability sampling approach that enlists participants based on specific characteristics or specific criteria directly applicable to the questions to be addressed in the research (Taherdoost, 2016). The sampling framework consists of actors or entities within Ghana's tourism and hospitality industry that have undergone a digital innovation drive, including professionals in the industry, management, and personnel. According to Ponelis (2015), convenience and judgmental sampling offers a cost-effective method for researchers to gather interviews or responses; however, it may face criticism for potential selection bias due to differences from the target population.

Judgmental (Purposive) sampling is a common method employed in qualitative research, enabling researchers to select participants according to specific criteria or criteria pertinent to the research question (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). According to Punch (2014), purposive sampling is well-suited for case analysis research, because it guarantees the chosen cases maximize the opportunity to gain a deep understanding of the problem in the research. This study will use a purposive sampling approach to identify participants with relevant knowledge and expertise in digital innovation within the tourism and hospitality sector in Ghana, because such information may not be obtained from other choices (Taherdoost, 2016).

4.5 Data Collection Technique

The technique used was a multiple case study. The multiple case studies explore a collection of cases, often to identify patterns, themes, and insights across the different contexts (Yin, 2014). Evidence for a case study can be gathered from various sources, including papers, participants, direct observation, archival records, interviews, and tangible artifacts. These sources contribute to a thorough comprehension of the phenomenon under investigation (Boateng, 2020; Penu, 2018; Hancock, Algozzine, & Lim, 2021; Alhassan, 2022).

The interview was conducted using an interview guide. Interviews enable researchers to investigate facts, facilitate easy comparisons, and reveal the emotional aspects of social experiences (Dinu, Vătămănescu, Stăneiu, & Rusu, 2023).

Qualitative research lacks strict guidelines on the number of units in a sample (Kindsiko & Poltimäe, 2019), with the appropriate sample size depending on the nature of the research and the data collected. As a result, universally applicable directives not exist or rigid rules for determining the number of participants in qualitative studies (Rusu Mocănașu, 2020). This study will involve 15 participants from the target population, chosen through judgmental and convenience sampling methods. Guest et al. (2006) found that data saturation typically occurs by 12–15 interviews, with key themes emerging as early as six.

4.6 Development of an Interview guide

An interview guide is a set of topics or questions that the interviewer aims to address during the interview (Roulston & Choi, 2018). It is called a guide because it helps direct the interviewer throughout the interview process to be able to ask questions relevant to the study (Roberts, 2020; Collins, 2014). The interview guide was developed based on the research objectives and the conceptual framework (Martinengo, Lin, Jabir, Kowatsch, Atun, Car, &

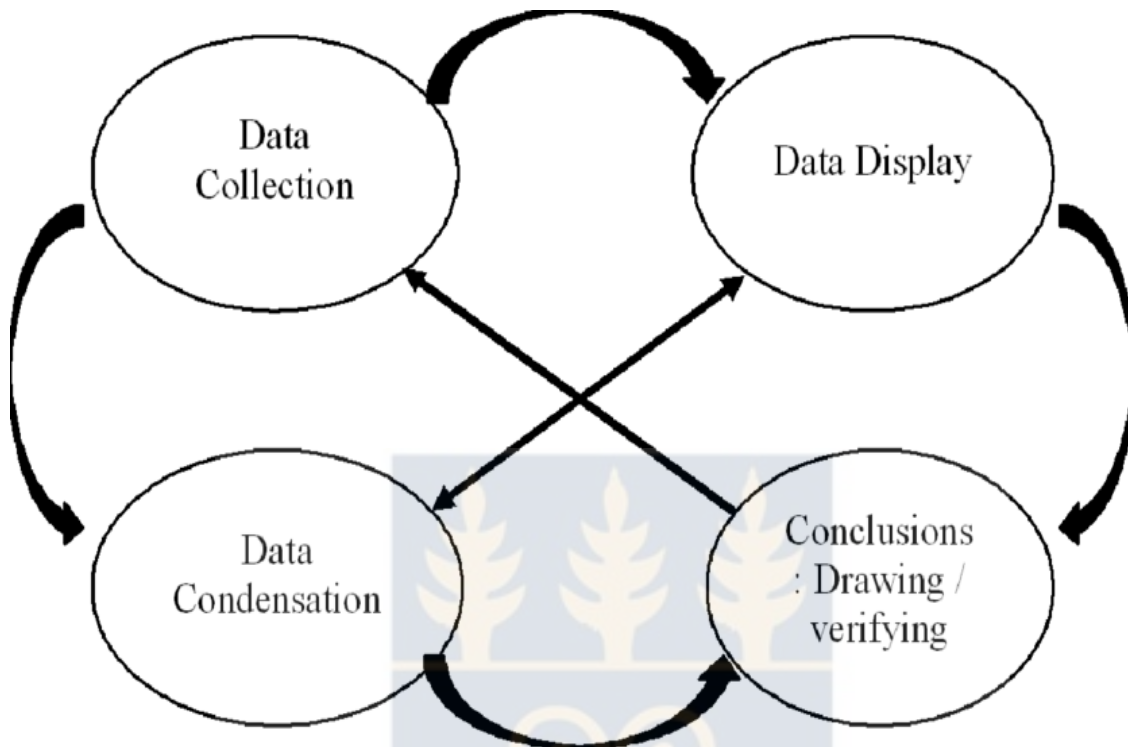
Tudor Car, 2023). Open-ended questions were asked about the constructs in the framework. The interview guide had an introduction, an overview of the research which covered the topic and research objectives, and contact of the researcher and the supervisor (Wilson, 2014). It was further divided into subsections: Section A (Background of the respondents), Section B (State of Digital Transformation), Section C (Digital Culture), Section D (Operations, Digital Technology and IT Strategy), and Section E (Digital Transformation) with concluding comments (See Appendix B). The questions were formulated using clear language and considering their relevance to the topic (Wintersberger & Saunders, 2020). Questions were formulated based on existing literature on digital transformation (Lokuge & Duan, 2023; Agbeko, Effah, & Boateng, 2021; Alhassan, 2022). Drawing from the available literature, they were crafted to gather comprehensive yet concise responses (Hawkins, 2018). Each question aimed to engage respondents to gather insightful information on digital transformation in the tourism and hospitality sector.

4.7 Data Analysis Technique

The method of analysis used in the study was identifying patterns. The thematic analysis includes the process of identifying and examining meaningful patterns within the data, coding them into themes or categories that highlight the most significant problems or concepts that emerge (Peel, 2020). It demands that the researcher be intentional, contemplative, and thorough (Braun & Clarke, 2014). Inductive coding was done, where themes emerge from the data without trying to fit into a pre-existing framework or theory.

Miles and Huberman's (1994) data analysis framework was employed. These techniques emphasize four key components: data collection, data display, data condensation, and drawing and verifying conclusions.

Figure 4. 1 Miles and Huberman's Data Analysis



Source: Miles and Huberman (2013)

4.7.1 Data Display

Visual representation of data simplifies the extraction of meaning from information. Various tools like charts, graphs, tables, and diagrams, alongside researcher-designed instruments such as illustrations, aid in presenting research findings (Miles & Huberman, 2013). Boateng (2016) emphasizes that data display not only encapsulates and organizes information but also facilitates the identification of themes and serves as a foundational step for deeper investigation. This visual organization enhances comprehension, enabling researchers to derive insights and prompt further exploration.

4.7.2 Data Condensation

Miles and Huberman (2013) define data condensation as a process involving data selection, concentration, simplification, aggregation, and transformation, which could encompass coding, pattern identification, or case analysis. In a study on digital transformation, the researcher conducted interviews and transcribed the gathered data. Subsequently, irrelevant data unrelated to the research focus were excluded after engaging with participants, even though it might hold relevance for analysis purposes. The retained information underwent reduction and presentation through descriptive statistics. Finally, as Boateng (2016) notes, the researcher compared the assembled data with existing theories and literature in the discussion section. This process allowed for aligning empirical findings with established frameworks, facilitating a comprehensive understanding and contextualization of the research within the broader theoretical landscape.

4.7.3 Conclusion Drawing and Verification

Upon data collection in qualitative studies, the analysis commences by observing consistencies, patterns, interpretations, and potential associations (Miles, Huberman, & Saldaña, 2018). The analyst continually cross-verifies conclusions as the study progresses. After acquiring data and formulating initial conclusions, the process of concluding unfolds. This aids in identifying pivotal factors impacting the industry's digital transformation, unveiling challenges, and uncovering opportunities that have emerged. Employing a qualitative exploratory approach (Yin, 2014), the research aims to delve into the intricacies of the subject matter, allowing for a comprehensive exploration of the phenomena under study to derive nuanced insights and understand the complexities of digital transformation within the industry.

Rather than measuring and evaluating numerical data, qualitative research is a method of probing that concentrates on comprehending the understanding and experiences of individuals

or groups (Peel, 2020). As an illustration, Braun and Clarke (2021) highlight the usage of theme analysis as a popular qualitative technique for social science research data analysis. The processes involved are considered transparent and systematic (Vaismoradi, Jones, Turunen, & Snelgrove, 2016), making them suitable for the study.

4.8 Ethical Considerations

Research ethics encompasses the study of standards of conduct and provides a method for navigating complex problems in decision-making and analysis (Cumyn, Ouellet, Côté, Francoeur, & St-Onge, 2019). In this research, the interviews were conducted with utmost respect for ethical principles and the rights of participants. Prior informed consent was sought, ensuring voluntary participation and privacy protection. According to Miracle (2016), individuals possess autonomy and the right to determine their participation in research activities. Data was collected anonymously and securely stored, and only used for the stated research purpose. Any potential risks or harm to participants were minimized, and confidentiality was maintained throughout the study. The researcher sought introductory letters from the Operations and Management Information Systems (OMIS) Department, verifying its report endorsement (See Appendix A).

4.9 Chapter Summary

The chapter extensively covered diverse paradigms and methods for data collection and analysis. It offered a rationale for employing qualitative and interpretive approaches, detailing the intricacies of conducting interviews, collecting data, and analyzing it. With these foundational aspects addressed, the subsequent chapter presents the study's findings, offering insights gleaned from the implemented research methodology and analysis procedures.

CHAPTER FIVE

RESEARCH ANALYSIS AND FINDINGS

5.1 Chapter Overview

The previous chapter introduced various research paradigms, concluding that the Interpretivism paradigm, combined with an exploratory approach, was the most suitable for this study. It also explored the implications of this choice on the data collection methods employed. The research findings are presented in this chapter.

5.2 Description of Participants and Organization

The study involved five beach resorts, each functioning as comprehensive holiday lodging facilities alongside the sea, offering tourists exclusive access to private beaches as their primary attraction. Additionally, seven hotels were engaged, providing accommodation, dining services, and bars. These hotels served as multifaceted establishments catering to lodging needs while offering restaurant and bar facilities to their guests.

Fifteen individuals from 14 unique companies in Ghana's tourism and hospitality sector were interviewed. The group included three women and twelve men. Among them, two did not disclose their educational background, one holds a West African Senior School Certificate (WASSCE), two have Higher National Diplomas (HND), eight possess a first degree, and two have earned master's degrees, showcasing a diverse range of educational backgrounds. Notably, two participants were from a single firm. This study encompassed a diverse range of perspectives from various industry players, offering comprehensive insights into the sector's dynamics and practices. The details are represented in Table 5.1 below:

Table 5.1: Description of participants

Position/ Gender	Type of Firm	Role	Level of Education
1. General Manager (Male)	Hotel	The day-to-day running of the facility.	Degree
2. General Manager (Male)	Beach Resort	The day-to-day running of the facility.	Degree
3. General Manager (Female)	Beach Resort	Managing the daily routine activities.	Masters
4. Operation Manager (Male)	Beach Resort	The day-to-day running of the facility.	Degree
5. Site Guide (Male)	Beach Camp	Receiving visitors and taking them around the place.	Not Disclosed
6. General Manager (Male)	Beach Resort	Receiving visitors and taking them around the place	Degree
7. Manager (Female)	Hotel	The day-to-day running of the Catering Services.	Degree

8. Operation Manager (Male)	Beach Resort	Managing the daily routine activities in the firm.	Degree
9. General Manager (Female)	Hotel	The day-to-day running of the facility.	HND
10. General Manager (Male)	Beach Resort	Managing the day-to-day activities of the firm.	Degree
11. Tour Guide (Male) (Female)	Tourism site	Receiving visitors and taking around the place	HND
12. Manager (Female)	Hotel	Managing the daily routine activities in the firm.	WASSCE
13. Tour Guide (Male)	Tourism site (Fort)	I run the facility day-to-day and manage all departments.	Masters
14. Manager (Male)	Hotel	Managing the daily routine activities in the firm.	Degree
15. Operations Manager (Male)	Hotel	Managing the daily routine activities in the firm.	Not Disclosed

5.3 Findings from the study based on the constructs

As stated in chapter four, the research methodology adopted in this study aligns with Miles & Huberman's approach, encompassing key stages such as data collection, display, condensation, and conclusion drawing and verification. The primary data collection method involved interviews, with participants selected through convenience sampling. An interview guide was shared and followed throughout the process to maintain consistency. The interview guide was developed in line with existing literature (Alhassan, 2022). During the study period, the prevalence of leaked audio on various social media platforms affected participant willingness to be recorded.

Consequently, only a subset of participants consented to audio recording facilitated by a smartphone. Some responses were transcribed directly during the interviews to accommodate this limitation. Subsequently, the collected data was organized and displayed in tabular format, then condensed by establishing codes and identifying overarching themes. The study's conclusions underwent rigorous validation against established literature, fortifying the findings' reliability. These findings were structured around pivotal constructs: Digital Culture, Operation, Technology, Strategy, and Digital Transformation. Each participant's insights were linked to their respective roles within the firm, offering a nuanced perspective. This approach facilitated a comprehensive analysis, allowing a multifaceted understanding of how digital culture, operational aspects, technology, strategy, and the transformation process interplay within organizational dynamics. The alignment of participant positions with their responses enriched the study's depth and applicability. The finding is presented below:

5.3.1 Digital Culture

One of the participants responded:

*I do not know anything of such nature hindering the use of digital technology. **We are always willing to use digital technologies. Yes, it does, we use it. (General Manager)***

Another also responded:

*Yes, people are ready to use digital technologies, but the work environment also encourages the use of digital technologies. **(General Manager)***

Another participant responded:

People are willing to use the technologies, so there is no hindrance in terms of digital culture.

*Our **environment encourages the use of the technology. (Operations Manager)***

Another participant also responded:

*It depends on management. The manual system will still be used if the management is not open to digital operation. In my view, it is very welcome. People have embraced it fully. You want to grow your business, so everyone yearns for it. **(General Manager)***

Then, another participant responded:

*It has a positive impact on the industry. **Yes, it is allowed. (General Manager)***

The prevailing digital culture within Ghana's tourism and hospitality sector signifies a workplace environment that actively encourages the adoption and utilization of digital technologies, demonstrating a proactive stance in leveraging technology to advance various aspects of the industry.

Operation

A participant said:

We have a website where our clients can contact us. People from even abroad can see our rooms and their condition and book for them. They can make payments through the website.

(General Manager)

Another participant also said:

The use of technology helps reach a wider audience than traditional means. This translates into more revenue. (Site Guide)

Another participant responded:

*This place is far from the Anloga township, so I would say that people would not be able to locate us without these technologies. Without digital technologies, decorating something nice and hiding it in your room will be like decorating something nice. **It helps people to patronize us.** (General Manager)*

Another participant said:

*Bookings are done and are the same as **reservations**. Aside from that, we use it for advertisement purposes. You can **order food in the comfort of your house** without coming here and have it delivered. In **forecasting**, you can tell how many guests you have in-house. You will know the number of rooms to be occupied in two or three days and plan towards that. It makes the work easier. **Customer feedback has generally been positive compared to the traditional ways of doing things.** In the past, you had to call the front desk office to book a reservation, and if the network was not good, you could not do that, but now you can do it on the website. (Operations Manager)*

Another also said:

*The sea came to destroy some things, so people came for the news, and it was all over the internet. **We use radio and TV for advertising**, and some people post pictures online.*

However, we are seeing results from the little we are doing. We know it will help us, so we will fully launch into it. (Site Guide)

Another also said:

*It helps people to **locate us easily**. Previously we could have only five people coming here in a week, but now the **numbers have increased**. It makes our work also **efficient**. We use it to assess the total number of visits in a month. (Operations Manager)*

Another participant further responded:

*When you go there (WEBSITE), you see the hotel rate. You can **book and make payment**. It is positive because before you take a car and come, go to the website or call any number there, you will know already, so you do not have to take a car. You get that thing when you make a call, so it is fast and **saves time**. You spend money buying data, so it is expensive. Yes, it has been helpful. (General Manager)*

Another participant also said:

*It makes the system productive by **reducing theft**. Helps to **generate reports** for managerial purposes. It allows for **easy documentation, and the records are readily accessible**. It gives **the organization a positive image**. People are looking for forward-looking organizations. It makes things easier. It opens the channel for collaboration and communication. A tour operator in London wants to bring people to Keta, allowing collaboration to happen. Helps people to expand the market. Social media can go further to reach the target market. Exchange of ideas among hospitality operators. (General Manager)*

Another person also said:

Some confirmed payments (on the website) do not hint at our account, so we provide an alternative payment medium. Customers feel that using such a platform is convenient, so they

prefer to pay online, and we do not want to inconvenience them. Some people prefer to come here without holding huge sums of money. If the customer can pay online, it is far better for them because of safety and security issues ... Since they cannot pay on the platform due to security issues, we need to provide the alternative, the MoMo. (General Manager)

The findings revealed that digital technologies are used in Ghana's tourism and hospitality industry for planning and forecasting, booking/reservation, communication, advertisement, making and receiving payments, pricing and billing clients, and security purposes (Maja, 2023).

It has also presented operational benefits such as efficiency, convenience, reduced crowd at the facilities, easy location of the business by clients, reduced cost and time, elimination of theft and pilfering in the organizations, and increased patronage. This is in agreement with the position of (Mende *et al.* 2019; Gupta, 2019 Osei *et al.* 2020) that digital technology has greatly improved the convenience and affordability of purchasing and delivery of tourism and hospitality services.

Digital Technology

A participant said:

*We have a website, and we are on Instagram and Facebook. As you can see, I use **smartphones and laptops to send messages via email and WhatsApp.** (General Manager)*

Another participant said:

Ok. So we use Facebook, Websites, Instagram, Mobile phones, laptops, and CCTV Cameras.
(General Manager)

This participant said:

*We have a **website** for smooth operation and easy access to facilities. Technology has become a norm, so you have to use it. You can scan a code and access all our services without visiting our website. (Operations Manager)*

A participant said:

The more specific the technology is, the more expensive it is. (General Manager)

Another participant said:

*I am leveraging **social media** to promote my business. It makes it easy for me to reach out to my customers. They place the order through **WhatsApp**, and the delivery guy delivers to them. It is so simple. (Manager)*

Another participant also said:

*Yes, we use digital technologies. We have a **website**, Instagram, and Facebook accounts. We also use email. People mostly locate us on the social media platforms. (Operations Manager)*

Then another also said:

You see, we have CCTV cameras all over the place. I can see whatever is going on here from my phone, where I find myself. (General Manager)

From another participant:

We use websites, Instagram, smartphones, laptops, email, WhatsApp, Facebook, and digital television. (General Manager)

Another participant:

I would say that using technology is common, and everyone uses it. We are doing away with the paper. We use the PMS Property Management System to coordinate every department.

It helps in planning. (Operations Manager)

Another participant also said:

The telcos do not give us the best service. Their charges are high. I buy 60gh airtime daily and a 2000gh bundle every month. We have the technologies, but the cost of operating the system is high. (Manager)

The findings reveal that digital technologies are widely used in various organizations in the tourism and hospitality industry. Digital technologies are said to have become a norm in the industry. The commonly used ones are websites, email, laptops, mobile phones, digital televisions, CCTV (Closed Circuit Television) cameras, and social media, including Instagram, Facebook, and WhatsApp.

The finding further revealed that adopting and using digital technologies have positively impacted their business in terms of profitability and achieving overall business objectives (Kimuli, Sendawula, & Nagujja, 2021).

IT Strategy

One of the participants said:

We do not have an IT officer, and I do everything myself. No, we do not have a strategy. (General Manager)

Another participant said:

Yes, we have IT persons, but they all reside in Accra, and they operate from there. No, I do not know about any IT strategy. (General Manager)

Another participant responded:

We have IT personnel in the organization. We have a policy manual or document on the use of IT. The business strategy is driving our IT strategy. However, the IT strategy influences the business strategy anyway. (General Manager)

Another participant also said:

I do that myself. We have a framework for conducting IT activities in the organization. It drives many business strategies. An IT strategy allows the business strategy to grow. (General Manager)

Another participant said:

The former manager oversees the website, so we do not have an IT officer. (General Manager)

The findings revealed that IT literacy is a prerequisite for employment in most tourism and hospitality firms, especially for management and leadership positions (Pshenichnykh & Novi, 2023). Although they were IT literates, most participants exhibited limited IT/IS strategy knowledge. Those alleged to have had a strategy could not prove it. Some barely could appreciate the role of IT/IS strategy and business strategy alignment.

Digital Transformation

One of the participants said:

It was not easy; the cost of acquiring the technologies was high. We have the technology, but the cost of operating the system is high. Electricity bills are also killing us. (General Manager)

Another participant said:

It has an open channel for collaboration and communication. A tour operator in London wants to bring people to Keta, allowing collaboration to happen. Helps people to expand the market. Social media can go further to reach the target market. (Operations Manager)

Another participant also said:

Lack of information on the available technologies is a challenge, and the more specific the technology is, the more expensive it is. (General Manager)

Another participant said:

I would say that using technology is common, and everyone uses it. We are doing away with the paper. We use the PMS Property Management System to coordinate every department. It helps in planning. Computer knowledge is a prerequisite for even employment. If you are deficient in that aspect, you are a company liability. It would help if you were computer literate. It is general in the industry. However, it also depends on where you are coming to work. No employer will be ready to teach you how to use the computer. (Operations Manager)

Another participant:

Mmmmm, I know about digital, but the transformation. Help me. No, oooo, we do not use, for the mobile phone we use, we are online also. (Manager)

Another participant also said:

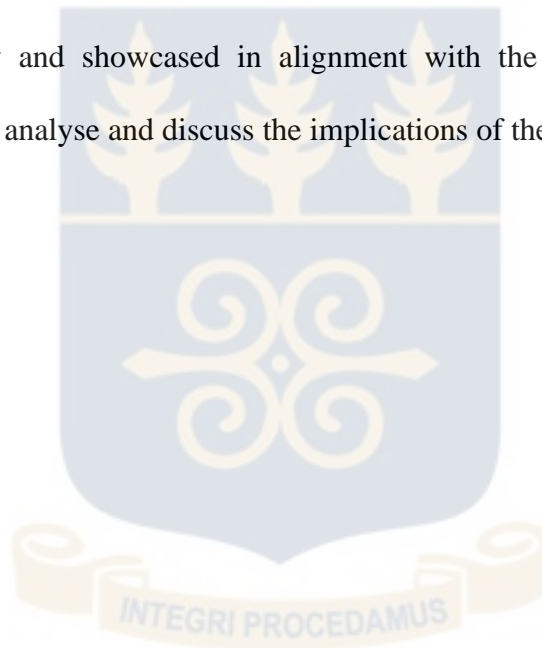
You see, the vice president talks about digital, digital so the government is in support. The Ghana Tourism Board has also developed an app, Booking.com, which is free. Continuous training of our employees is also a challenge. That increases our cost of operation. Along the line, we review most of the software we use. Domain name services are becoming expensive. Previously, if you had a problem, you would call them to click here and click here; that is all. However, if you have a problem, they will charge you hugely. (General Manager)

The findings revealed that Ghana's tourism and hospitality industry has widely adopted digital technologies. This is due to the availability of digital customers willing and ready to use these

technologies, work environment support, the availability of the technologies, and operational compatibility. Despite these realities, there are equally some challenges.

5.4 Chapter Summary

This chapter presents the qualitative findings and discussions derived from the study, employing the Critical Success Factor theory as the basis. The factors within each construct were comprehensively elucidated, drawing valuable lessons from this exploration. Interviews were done meticulously and showcased in alignment with the research objectives. The forthcoming chapter will analyse and discuss the implications of these study findings.



UNIVERSITY OF GHANA

CHAPTER SIX

DISCUSSION OF FINDINGS

6.1 Chapter Overview

This chapter thoroughly examines and interprets research outcomes from field data collected via interviews and researcher observation. The analysis of interview data revealed recurring themes shared by all interviewees. It delved into an elaborate exploration of the impact of Digital Transformation on Ghana's tourism and hospitality industry to address the investigation question. The interviews involved representatives from fifteen firms holding diverse positions. These representatives were selected as credible sources of information. The research findings, analysis, and interpretation address the effects of the digital revolution on Ghana's travel and hotel sector.

6.2 Addressing the Research Questions

6.2.1 What is the current state of digital transformation in Ghana's tourism and hospitality industry?

This section asked whether they knew of digital technologies and what kind of digital technologies they were using.

Table 6.1 State of Digital Transformation

Findings	Response in Support of the Finding	Reference to Support

<p>Limited Knowledge of digital transformation</p>	<p><i>I do not know the term digital transformation. Can you explain it to me?</i></p> <p><i>I read Hospitality Management, and as a course in the program, I studied digital transformation.</i></p> <p><i>Mmmmm, I know about digital, but the transformation. Help me. No, oooo, we do not use it. For the mobile phone we use, we are online also.</i></p> <p><i>That is what I even want to ask. Please can you tell me a bit about it?</i></p>	<p>Anim-Yeboah et al. (2020)</p>
<p>Digital Technologies used</p>	<p><i>We have a website and are on Instagram and Facebook; as you can see, I use smartphones and laptops and send messages via email and WhatsApp.</i></p> <p><i>We use website, Instagram, Smartphone, Laptops, Email, WhatsApp, Facebook, Digital Television</i></p> <p><i>I would say that using technology is common, and everyone uses it. We are doing away with the paper.</i></p> <p><i>We use the PMS Property Management System to coordinate every department. It helps in planning</i></p>	

	<p><i>Ok. So we use Facebook, Website, Instagram, Mobile phone, Laptop, CCTV Cameras.</i></p> <p><i>We have a website for smooth operation and easy access to facilities. Technology has become a norm, so you have to use it. You can scan a code and access all our services without visiting our website.</i></p>	
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Source: Authors construct based on findings

To assess the current state and understanding of digital transformation initiatives in Ghana’s tourism and Hospitality sector, the participants were asked questions that helped to understand the state of Digital Transformation in the industry in 15 different firms from Volta and Greater Accra regions. The findings revealed that the term ‘Digital Transformation’ is new to most participants, though they used digital technologies, as seen in Table 6.1 State of Digital. According to the findings, digital technologies used in Ghana’s tourism and hospitality industry include Facebook, Website, Instagram, Mobile phones, Laptops, Closed Circuit Television (CCTV) Cameras, Emails, Smartphones, digital televisions, PMS, and Property Management Systems. These responses were similar among all the participants from all the firms, although they were not all using all the digital technologies listed above. It aligns with the definition of digital transformation by (Liere-Netheler et al., 2018; Khanom, 2023; Fitzgerald et al., 2014) that it involves leveraging new digital technologies (such as social media, mobile, analytics, or embedded devices) to drive significant business improvements, including enhancing customer experience, streamlining operations, or developing new business models. This finding further confirms Schwertner's (2017) position that SME managers are fully cognizant of the crucial

role of digital business transformation in their operations and are generally familiar with these technologies.

A Property Management System (PMS) or a Hotel Operating System can refer to various business contexts, including real estate, manufacturing, logistics, intellectual property, government, or hospitality accommodation management (Shekinah, 2021). A hotel property management system is a tool designed to facilitate the management of various front-office functions within a hotel or hotel group (Moraitis, 2018; Moyeenudin, Parvez, Anandan, & Narayanan, 2018). These functions typically included handling reservation bookings, facilitating guest check-in and checkout processes, assigning rooms, managing room rates, and overseeing billing operations (Smrutirekha, Sahoo, & Karki, 2022). Past research on digital transformation within the tourism and hospitality sector lacks evidence of the utilization of this particular technology, though it is a well-researched topic, indicating its novelty in this study (Commey, Akonnor, Commey, & Mensah, 2023; Akyeampong & Nutsugbodo, 2017). The observation that only two firms out of the interview sample adopted this technology might stem from their larger size relative to others. This discrepancy in adoption rates could imply that larger firms might have the resources or capacity to implement such innovations compared to smaller entities within the industry (Kruja, Hysa, Duman, & Tafaj, 2019).

Anim-Yeboah et al. (2020) emphasized that "digital transformation" embodies a recent amalgamation of business and technology. The term's novelty likely accounts for the widespread unfamiliarity among many study participants. Its recent emergence signifies a delay in its comprehensive recognition, particularly among individuals operating within sectors that have not fully embraced digitalization (Warner & Wäger, 2019). This lag in understanding stems from the rapid evolution and integration of digital technologies into business operations, resulting in a gap between the concept's inception and its dissemination among professionals. As industries gradually adapt to technological advancements, the awareness and

comprehension of "digital transformation" will likely grow (Berger, 2015), reflecting the ongoing progression towards a more digitally integrated business landscape.

The comprehensive analysis confirms a significant digital transformation in tourism and hospitality. This evolution resonates closely with the multifaceted aspects outlined in the literature review about digital transformation. Notably, the industry has embraced digitalization, evident through the emergence of digital customers, the integration of digital work environments, robust digital infrastructure, streamlined digital operations, and the provision of digitalized products and services. This alignment underscores a profound shift towards leveraging technology to enhance customer experiences, optimize operational efficiencies, and diversify service offerings. The tourism and hospitality sector's adaptation to these digital dimensions reflects a substantial embrace of technological advancements to meet evolving market demands and elevate industry standards.

6.2.2 What are the enablers and challenges that hinder the adoption of digital technologies in Ghana's tourism and hospitality industry?

The section discusses the enablers and challenges that hinder the adoption of digital technologies.

Table 6.2.1 Enablers of Digital Transformation

Findings	Response in Support of the Finding	Reference to Support

<p>Industrial/Government support</p>	<p><i>The Ghana Tourism Board has also developed an app, Booking.com, which is free.</i></p> <p><i>You see, the vice president talks about digital, digital so the government is in support.</i></p> <p><i>I may say it is our effort and the company's effort. If the website is there and you, the manager, are not going there, it will not work.</i></p>	<p>Jiang and Stylos (2021)</p>
<p>Operational efficiency</p>	<p><i>In Ghana, accountability drives our business. So, I will say that accountability motivates people to use the technologies.</i></p> <p><i>The use of technology helps reach a wider audience than traditional means. This translates into more revenue.</i></p> <p><i>Feedback has generally been positive compared to traditional ways of doing things. In the past, you had to call the front desk office to book a reservation, and if the network was not good, you could not do that, but now you can do that on the website.</i></p>	

	<p><i>Convenience: they can access other services here online without having to come out to ask anyone but do it on the website.</i></p> <p><i>Bookings are done and are the same as reservations.</i></p> <p><i>Aside from that, we use it for advertisement purposes.</i></p> <p><i>You can order food in the comfort of your house without coming here and delivering it.</i></p>	
Availability of Digital Technology	<p><i>I imported all these (pointing to laptops, printers, scannable machines, CCTV Cameras, etc.) from abroad.</i></p>	
General Acceptability	<p><i>Everyone is using digital technologies these days because it makes things easy.</i></p>	

Source: Authors construct based on findings

Enablers are the factors that facilitate the adoption of digital technologies, while challenges are problems and issues that interfere with the adoption and use of digital technologies. The researcher aimed to identify the facilitating factors that contribute to the success of digital transformation. The study's results indicate that a government initiative is a pivotal force

propelling digital transformation on a national scale. Past and present governments have been committed to the drive for digital transformation (Gyasi, 2021). Furthermore, robust industrial support within the tourism and hospitality sector serves as a catalyst, reinforcing the momentum of the digital transformation drive. Together, these factors underscore a collaborative effort between government initiatives and industry support, synergistically fostering a conducive environment for widespread digital advancement in the country.

As Jiang and Stylos (2021) noted, integrating various digital technologies within the industry has significantly impacted operational efficiency. This amalgamation has resulted in a spectrum of benefits, including increased convenience, elimination of delays, and heightened accountability across operations. These technological interventions are pivotal in optimizing and refining processes, ensuring a more efficient and transparent operational framework within the industry. Consequently, this transformation bolsters the industry's capacity to deliver services effectively and maintain high operational integrity and performance standards.

The findings further revealed the availability of digital technologies and their general acceptability and use. There are new technologies in recent times compared to some two decades ago (Pencarelli, 2020). The participants from the various firms in the industry were quick to admit employees' and customers' readiness and willingness to use digital technologies due to the various advantages they offer. One of the general managers said, 'People are looking for organizations who are forward-looking.' This was said to emphasize that customers are looking out and ready to do business with firms that are using digital technologies.

Table 6.2.2 Challenges to Digital Transformation

Findings	Response in Support of the Finding	Reference to support

<p>Higher Cost</p>	<p><i>It was difficult; the cost involved in acquiring the technologies was high.</i></p> <p><i>We have the technology, but the cost of operating the system is high. The electricity bill is also killing us.</i></p> <p><i>Along the line, we review most of the software we use.</i></p> <p><i>Domain name services are becoming expensive.</i></p> <p><i>Previously, if you had a problem, you would call them to click here and click here; that is all. However, if you have a problem, they will charge you hugely.</i></p> <p><i>The more specific the technology is, the more expensive it is.</i></p> <p><i>The telcos do not give us the best service. Their charges are high. I buy 60gh airtime daily and a 2000gh bundle every month. We have the technologies, but the cost of operating the system is high.</i></p>	<p>Ofosu-Ampong (2021)</p>
<p>Poor network coverage</p>	<p><i>Sometimes, you receive a call and may not hear the person's voice. Sometimes, you want to visit the website, and the network misbehaves.</i></p> <p><i>The network is our problem, my brother.</i></p>	<p>Osei (2022)</p>

	<p><i>We are only talking about it. The network is not there.</i></p> <p><i>The services provided by the telcos are not the best, the internet service is always off.</i></p>	
Cyber attack	<p><i>Cyber issues are a challenge to us. People pay for reservations on the platform, but it is not reflected in our bank account, so we have stopped that. Since they cannot pay on the platform due to security issues, we must provide an alternative to MoMo.</i></p>	

Source: Authors construct based on findings

While digital technologies present advantages for the tourism and hospitality sector, several obstacles impede their full utilization in client service. Challenges include limited accessibility to the internet due to inadequate network coverage, increased operational expenses, and the looming threat of cyber-attacks. In their study, Ofori-Atakorah, Honlah, Atta Poku Jnr, Frimpong, and Achem (2023) advised that the government and telecommunication companies should collaborate to enhance communication and internet services nationwide, facilitating online studies. Another study's findings affirmed Ghanaian firms' strong inclination toward technology adoption. However, they encountered hurdles in accessing reliable internet services due to their high cost, presenting a notable challenge despite their tech-forward approach (Ankaong, 2023). Dzisah (2022) rightly put it that Ghana has a mobile phone subscription rate that surpasses its total population. However, internet penetration remains low, with many areas experiencing erratic service or complete service unavailability. A manager expressed

frustration over spending GHS 60 on airtime daily, amounting to GHS 2000 monthly for data bundles. This reveals significant ongoing expenses incurred for communication purposes, indicating a considerable financial burden on telecommunications expenses within the organization. Agormedah, Henaku, Ayite, and Ansah (2020) as part of their recommendation on their finding that currently, internet access in Ghana is expensive, encouraged university management to negotiate with cellular operators to secure educational discounts for distance learning students, addressing a key challenge in distance education Karanasios et al. (2022) noted that micro-enterprises predominantly depend on cost-free technologies for their communication, advertising, promotion, and day-to-day operations, posing a hurdle to their expansion and development. This overreliance on free technologies can be attributed to the high cost of acquiring customized technologies that most firms cannot afford.

Another manager also recalls discontinuing payment acceptance for reservations due to cyber-attacks on the company's website. Consequently, they shifted to mobile money, highlighting a necessary change in payment methods prompted by cybersecurity concerns to safeguard customer transactions and data, which is confirmed by (Boakye, Sarpong, Meissner, & Ofose, 2023). They believe that in the modern landscape, frequent cyber-attacks cause significant technical disruptions within organizations, tarnishing their reputations. These breaches disrupt operations and inflict reputational damage, highlighting the pervasive threat and consequences contemporary businesses face due to cybersecurity vulnerabilities. These multifaceted challenges dissuade firms from embracing digital solutions, constraining their ability to harness technology's full potential in enhancing customer experiences. As a result, the sector faces an ongoing challenge in effectively balancing the benefits of digitalization with the intricate hurdles that hinder its complete implementation.

The leading challenge is the poor telecommunication network, affecting internet access and bandwidth in urban and rural areas. This contradicts the findings from the study by Fitzgerald,

Kruschwitz, Bonnet, and Welch (2014) that the most frequently discovered obstacle to digital transformation was “lack of urgency” due to complacency. However, the findings are consistent with Benoit (2021), who states that although digital transformation offers considerable advantages for the tourism and hospitality industry, it also encounters hurdles. A significant portion of the African population, exceeding 900 million individuals, remains unconnected to the Internet. Moreover, high prices and limited bandwidth in various areas pose substantial challenges for those with connectivity. The findings also resonate with Karanasios et al. (2022), who state that Ghana has consistently placed within the lower percentile among countries regarding its digital infrastructure over the past decade. In the year 2016 Ghana held 103rd out of 139 countries in the Global Information Technology Report. By 2020, it slightly improved but remained in the lower range, securing the 96th spot out of 130 countries in the Network Readiness Index. This further affirms the challenge of poor network coverage.

6.2.3. What is the impact of digital technologies on digital transformation in the tourism and hospitality industry?

This section discusses the impact of digital technologies on digital transformation in Ghana’s tourism and hospitality industry.

Table 6.3 Impact of Digital Technology on Digital Transformation

Findings	Response in Support of the Finding	Reference to support
Operational impact	<i>It opens a channel for collaboration and communication. A tour operator in London wants to bring people to Keta, allowing collaboration to happen.</i>	Hofacker (2019)

	<p><i>Because we want to prevent the human interface human opinion on reportage, so if you have digital technologies that have data and want to have reports in different forms, you can get them. For example, I want to know my occupancy rate for January; it is easy for me to use the computer. It helps to get an accurate sum; you need not go and recount.</i></p> <p><i>I am leveraging social media to promote my business. It makes it easy for me to reach out to my customers.</i></p>	
<p>Opportunities</p>	<p><i>It helps people to expand the market. Social media can go further to reach the target market. Exchange of ideas among hospitality operators.</i></p> <p><i>The use of technology helps reach a wider audience than traditional means. This translates to more revenue.</i></p> <p><i>Without digital technologies, decorating something nice and hiding it in your room will be like decorating something nice. It helps people to patronize us.</i></p>	
<p>Requirement for Employment</p>	<p><i>I would say that using technology is common; everyone uses it. Computer knowledge is a prerequisite for even employment. If you are deficient in that aspect, you are</i></p>	

	<p><i>becoming a liability to the company. It would help if you were computer literate.</i></p> <p><i>It is general in the industry. However, it also depends on where you are coming to work. No employer will be ready to teach how to use the computer.</i></p> <p><i>I studied hospitality management, and digital transformation was a course we took to prepare for the task ahead.</i></p> <p><i>My former boss was in charge, but he is no longer here. He is the one who has been teaching me the IT small, small.</i></p>	
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Source: Authors construct based on findings

The researcher aimed to determine how effective the digital technologies implemented were within the context of the digital transformation process. The data outlined in Table 6.3 provides a detailed account of the outcomes of incorporating digital technologies within the tourism and hospitality sector. It specifically highlights several significant operational advantages attained through this integration. One key benefit is the enhancement of collaboration among various stakeholders involved in the industry. By leveraging digital tools, these stakeholders can more effectively work together, share information, and coordinate efforts, ultimately fostering smoother and more productive interactions (Gretzel, Sigala, Xiang, & Koo, 2015). Furthermore, the findings underscore the establishment of more efficient communication channels facilitated by digital technology adoption (Neuhofer, Buhalis, & Ladkin, 2014). This

improved communication plays a pivotal role in streamlining operations, ensuring quicker dissemination of information, and enabling swift decision-making processes.

Additionally, integrating digital technologies has notably reduced the necessity for extensive human intervention in day-to-day operational tasks. Automation and digitization have optimized various processes, lessening the dependency on manual labour for routine operations (Parker & Grote, 2022). This increases efficiency and minimizes errors, allowing personnel to focus on more strategic and value-added tasks within the industry (Bänziger, Kunz, & Wegener, 2020). Digital tools facilitate seamless customer outreach, enabling businesses to connect with their target audience more efficiently. The utilization of these technologies not only streamlines internal processes but also enhances customer engagement, ultimately contributing to improved service delivery and overall industry performance (Buhalis, Harwood, Bogicevic, Viglia, Beldona, & Hofacker, 2019; Pencarelli, 2020). This was Amoako and Amoah (2021) position that digital transformation has greatly influenced Ghana's tourism industry by boosting efficiency, elevating customer satisfaction, and enriching the overall tourism experience in the country.

The findings confirmed that proficiency in computer skills and a comprehensive understanding of digital technology have evolved into essential requirements for securing employment within the tourism and hospitality sector (Wang & Tsai, 2014). The industry's dynamic shift towards digitalization has rendered these skills indispensable, emphasizing the need for prospective employees to possess a robust grasp of technological tools and capabilities to effectively navigate and excel in various roles within the field (Carlisle, Ivanov, & Dijkmans, 2023). As a manager responded, *computer knowledge is a prerequisite for even employment. If you are deficient in that aspect, you are a company liability.* In their study, Bharwani and Talib (2017) identified proficiency in computer skills as a high-rank functional competency (skills) required by employees in the tourism and hospitality industry.

Overall, the findings in Table 6.3 highlight several opportunities stemming from adopting digital technologies. These include the potential for market expansion, facilitated by an increased customer base, ultimately resulting in amplified profits. Moreover, digital tools offer enhanced visibility and accessibility for firms operating in remote areas, enabling them to tap into previously untapped markets and connect with a broader customer demographic, fostering sustained growth and improved market presence (Maitra, 2021; Bethapudi, 2013). It emphasizes how integrating digital technologies has positively influenced operations within the tourism and hospitality sector, fostering collaboration, improving communication, and diminishing reliance on manual intervention for smoother and more effective functioning. The industry's evolution has rendered proficiency in computer skills and a comprehensive grasp of digital technology indispensable, forming the cornerstone for success and advancement within its competitive landscape.

6.3 Chapter Summary:

This chapter delved into examining the gathered survey data, focusing on digital culture, operations, technology, strategy, and the influence of digital transformation. Utilizing statistical methodologies, the study meticulously analyzed the field-acquired data. The research findings and subsequent analysis fully understood how digital transformation significantly affects Ghana's tourism and hospitality sector. This segment established a robust foundation by aligning with exploring the industry's evolution through technological advancements.

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Chapter Overview

This chapter encapsulates the research through a comprehensive synthesis. It presents findings aligned with research objectives, addressing the influence of digital innovation initiatives on Ghana's tourism and hospitality sector. The chapter offers a cohesive summary by integrating these findings into the research goals and problem-solving inquiries. Additionally, it culminates in a conclusion with recommendations.

7.2 Summary

The study started in **Chapter 1** by providing an understanding of the impact of digital transformation in Ghana's tourism and hospitality industry; after detailing the diverse categories and classifications of digital transformation, alongside its associated challenges and benefits, the researcher proceeded to investigate the following research questions aimed at achieving the study's objectives: Based on the objectives and the research purpose, the following research questions were formulated:

1. What is the current state of digital transformation in Ghana's tourism and hospitality industry?
2. What are the enablers and challenges that hinder the adoption of digital technologies in Ghana's tourism and hospitality industry?
3. What is the impact of digital technologies on digital transformation in the tourism and hospitality industry?

Chapter 2 commenced with an extensive exploration of the pertinent literature on digital transformation, encompassing its overview, definitions, scope, types, benefits, and challenges. Additionally, it delved into an in-depth review of existing literature, highlighting both current understanding and identified gaps in the field. The chapter concludes by summarizing key findings and outlining opportunities for future research.

In **Chapter 3**, the study outlines the research framework deemed suitable to achieve the study's objectives. Chapter 3 extensively examines pertinent literature connected to the chosen research theory, emphasizing the Critical Success Factor theory. Rather than developing an entirely new theory on digital transformation, the chapter focuses on conceptualizing a model derived from the Critical Success Factor framework, considered suitable for arriving at the study's objectives. It explores the theory's utility and previous applications and justifies its selection as the research framework. Additionally, the chapter addresses the theory's advantages and prior uses in research, outlines the chosen constructs and limitations, and culminates in summarizing the key discussions.

After examining the theoretical framework and formulating a model in the preceding section, **Chapter 4** delves into the research methodology adopted for this study. It outlines the research paradigm, expounds on the chosen research design and methodology, and elucidates the data collection and analysis procedures employed. The chapter culminates with a comprehensive summary encapsulating the main points discussed.

In **Chapter 5**, the study unveils the outcomes from the participant responses, offering an insightful exploration rooted in the Critical Success Factor theory. Each case participant's interaction with digital culture, operations, technology, strategy, and digital transformation is

thoroughly narrated, emphasizing their collective influence and subsequent impact on Ghana's tourism and hospitality industry.

Chapter 6 undertook an in-depth analysis of the case findings outlined in Chapter 5, focusing on addressing the research questions and identifying pertinent themes. It did so by integrating the developed conceptual model derived from the Critical Success Factor framework, evaluating aspects such as motivation and outcomes. This chapter extensively explored the alignment of research inquiries with the literature reviewed in Chapter 2, the research framework established in Chapter 3, and the findings detailed in Chapter 5. As a result, the analysis presented six propositions (refer to Table 7.1) and introduced an empirically tested and refined research framework (refer to Figure 7.1) based on the findings.

Table 7. 1 Postulations made from findings

No.	Proposition	Outcome
1	Digital culture may influence the adoption of digital technology.	✓
2	Digital culture may influence the operation.	✓
3	Digital culture may influence IT strategy.	✓
4	Operations may influence digital technology adoption.	✓
5	IT Strategy may lead to digital technology adoption.	✓
6	Technology adoption may influence IT strategy.	✓
7	Technology adoption may lead to digital transformation.	✓

✓ Used in Table 7.1 means the findings have established the relationship.

Figure 7. 1 Conceptual framework remodelled based on findings



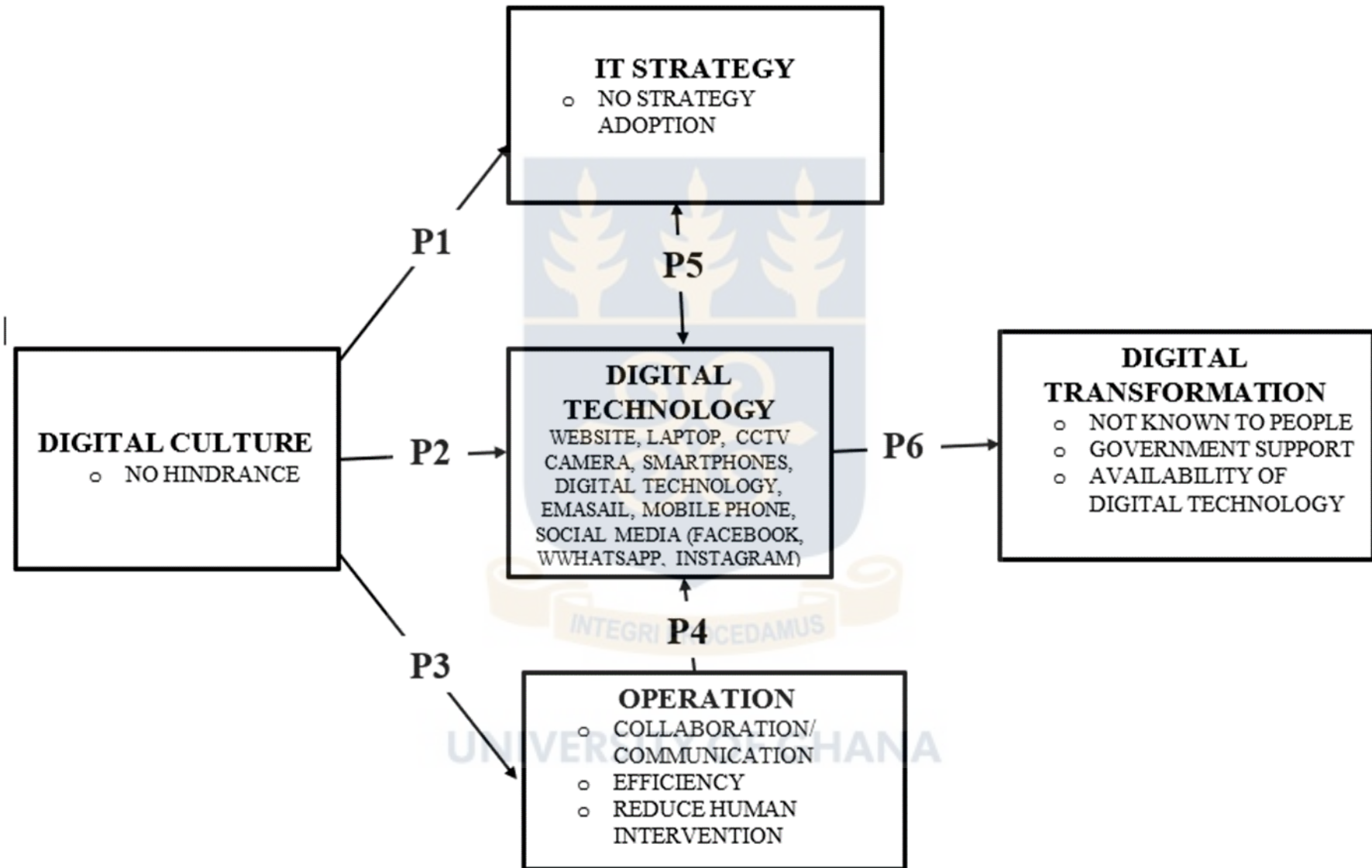


Table 7.2: Mapping Research Objectives to Findings and Contributions (Metrix)

Research Purpose: Exploring the impact of Digital Transformation on Ghana's tourism and hospitality industry			
Research objective	Research findings	Extant literature	Contributions, implications, and recommendation
1. To determine the current state of digital transformation in Ghana's tourism and hospitality industry.	1. Digital transformation is new to most participants, although they use digital technologies in their firms.	Anim-Yeboah et al. (2020) emphasized that "digital transformation" embodies a recent amalgamation of business and technology. Digital business transformation is a new phenomenon and an ongoing process, with no organization having fully reached the final stage of maturity yet (Schwertner, 2017).	This study contributes to comprehending digital transformation dynamics within emerging economies. It comprehensively analyses the current landscape, shedding light on influential factors and challenges impacting digital transformation initiatives.

	<p>2. Digital technologies used in Ghana's tourism and hospitality industry include Facebook, Website, Instagram, Mobile phones, Laptops, Closed Circuit Television (CCTV) Cameras, Emails, Smartphones, digital televisions, and Property Management Systems (PMS).</p> <p>3. The findings confirm a significant digital transformation in tourism and hospitality.</p>	<p>Liere-Netheler et al. (2018) established that using new digital technologies (social media, mobile, analytics, or embedded devices) enables major business improvements.</p> <p>Schwertner (2017) states that SME managers are fully aware of the important role digital business transformation plays in their businesses and are mostly aware of such technologies, which most firms are using.</p>	<p>This research sets the stage for identifying and exploring evolving trends within the digital transformation sphere.</p>
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<p>2. To identify the enablers and challenges hindering the adoption of digital technologies.</p>	<p><u>Enablers:</u></p> <ol style="list-style-type: none"> 1. The findings indicate that government initiative is a pivotal force propelling digital transformation. There is robust industrial support within the tourism and hospitality industry. 2. Operational Compatibility 3. The availability of digital technologies and their general acceptability and use. 	<p>Past and present governments have been committed to the drive for digital transformation (Gyasi, 2021).</p> <p>Most of the technologies used are flexible and scalable (Chen & Li, 2013)</p> <p>The findings further revealed the availability of digital technologies and their general acceptability and use.</p>	<p>The findings serve as a crucial resource for industry practitioners, providing a comprehensive understanding of their digital readiness and offering invaluable guidance for strategic decision-making.</p> <p>These findings act as a foresight tool, allowing practitioners to anticipate potential enablers and obstacles associated with the digital transformation journey.</p>

	<p><u>Challenges:</u></p> <ol style="list-style-type: none"> 1. Limited accessibility to the internet due to inadequate network coverage. 2. Cost digital technologies. 	<p>There are new technologies in recent times compared to some two decades ago (Pencarelli, 2020).</p> <p>In their study, Ofori-Atakorah et al. (2023) advised that the government and telecommunication companies should work together to improve communication and internet services in the country to facilitate online studies.</p> <p>Karanasios et al. (2022) noted that micro-enterprises predominantly</p>	<p>Leveraging research insights empowers industry practitioners to navigate the complex terrain of digital integration with greater confidence and efficiency. It enables them to capitalize on opportunities, mitigate risks, and chart a strategic course that optimally aligns with their organizational objectives, ensuring a more successful and sustainable digital transformation journey.</p> <p>Through meticulously evaluating ongoing initiatives, policymakers would gain the necessary</p>
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	<p>3. The looming threat of cyber-attacks.</p>	<p>depend on cost-free technologies for their communication, advertising, promotion, and day-to-day operations, posing a hurdle to their expansion and development. This overreliance on free technologies can be attributed to the high cost of acquiring customized technologies, which most firms cannot afford.</p> <p>The researchers believe that in the modern landscape, frequent cyber-attacks cause significant technical disruptions within organizations, tarnishing their reputations. These breaches disrupt operations and inflict</p>	<p>intelligence to fine-tune their methods, fostering an environment primed for digital transformation. This proactive approach would empower the formulation of policies that actively endorse and incentivize the seamless integration of digital technologies across diverse sectors.</p>
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		<p>reputational damage, highlighting the pervasive threat and consequences faced by contemporary businesses due to cybersecurity vulnerabilities (Boakye, Sarpong, Meissner, & Oforu, 2023).</p>	
<p>3. To assess the impact of digital technologies on digital transformation in the tourism and hospitality industry.</p>	<p>1. Operational impact: It has brought about efficiency and minimized errors.</p> <p>2. Opportunities: Helps foster collaboration and improve communication.</p>	<p>As noted by Jiang and Stylos (2021), the integration of various digital technologies within the industry has significantly impacted operational efficiency.</p> <p>One key benefit is the enhancement of collaboration among various stakeholders involved in the industry.</p>	<p>Future studies in this field could significantly advance by adopting a mixed-method approach, amalgamating qualitative and quantitative methodologies. This comprehensive strategy would enable a multifaceted exploration of the industry's digital</p>

	<p>3. Digital skill is a requirement for employment in the tourism and hospitality industry.</p>	<p>By leveraging digital tools, these stakeholders can more effectively work together, share information, and coordinate efforts, ultimately fostering smoother and more productive interactions (Gretzel, Sigala, Xiang, & Koo, 2015).</p> <p>The industry's dynamic shift towards digitalization has rendered these skills indispensable, emphasizing the need for prospective employees to possess a robust grasp of technological tools and capabilities to effectively navigate and</p>	<p>transformation, offering a nuanced and inclusive perspective.</p> <p>Successful sensitization endeavors are pivotal to empowering stakeholders to enable them to grasp and excel in the swiftly changing digital landscape, fostering innovation and enhanced guest experiences.</p> <p>Governments should collaborate with telecommunication agencies to enhance internet accessibility and coverage.</p>
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		excel in various roles within the field (Carlisle, Ivanov, & Dijkmans, 2023)	
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7.3 Implications of the Study

This study holds implications across research, practical applications, and policy domains.

7.3.1 Implication of Research

This study contributes to comprehending digital transformation dynamics within emerging economies. It comprehensively analyses the current landscape, shedding light on influential factors and challenges impacting digital transformation initiatives. Its significance lies in capturing the present status and serving as a springboard for future academic pursuits. By establishing a robust foundation, this research sets the stage for identifying and exploring evolving trends within the digital transformation sphere. It offers a roadmap for delving deeper into uncharted territories, propelling scholarly investigations toward pioneering solutions.

This groundwork fuels ongoing scholarly inquiry and catalyzes the development of innovative approaches and strategies tailored to the nuances of emerging economies. The study's contribution resonates beyond its immediate findings, shaping a trajectory for continuous exploration and the evolution of transformative practices, thus pivotal in advancing digitalization agendas within emerging economies.

7.3.2 Implication to Practice

Research insights are a crucial resource for industry practitioners, providing a comprehensive understanding of their digital readiness and offering invaluable guidance for strategic decision-making. With these insights, organizations can meticulously evaluate their current

preparedness for digital integration. This evaluation forms the cornerstone for informed and judicious decisions surrounding adopting digital technologies.

Furthermore, these research findings act as a foresight tool, allowing practitioners to anticipate potential enablers and obstacles associated with the digital transformation journey. This proactive approach enables organizations to pre-emptively strategize and tailor their approaches according to industry-specific needs. By doing so, they can align resources, talent, and infrastructure, facilitating smoother digitalization transitions.

Ultimately, leveraging research insights empowers industry practitioners to navigate the complex terrain of digital integration with greater confidence and efficiency. It enables them to capitalize on opportunities, mitigate risks, and chart a strategic course that optimally aligns with their organizational objectives, ensuring a more successful and sustainable digital transformation journey.

7.3.3 Implication to Policy

The research findings serve as a beacon for policymakers, providing a roadmap to crafting targeted strategies to accelerate digitalization. These insights are instrumental in not only boosting competitiveness across industries but also in cultivating sustainable growth paradigms. Through meticulously evaluating ongoing initiatives, policymakers would gain the necessary intelligence to fine-tune their methods, fostering an environment primed for digital transformation. This proactive approach would empower the formulation of policies that actively endorse and incentivize the seamless integration of digital technologies across diverse sectors.

The policies will streamline operations and pave the way for far-reaching societal and economic advantages. They facilitate increased efficiency, innovation, and accessibility while

catalyzing economic growth and societal development. Furthermore, this research contributes to a foundation of knowledge by shedding light on the critical factors for successful digitalization, enabling policymakers to navigate challenges, seize opportunities, and chart a course toward a digitally empowered future.

7.4 Limitations and Future Research Directions

Future studies in this field could significantly advance by adopting a mixed-method approach, amalgamating qualitative and quantitative methodologies. This comprehensive strategy would enable a multifaceted exploration of the industry's digital transformation, offering a nuanced and inclusive perspective. Particularly valuable would be the examination of digital transformation from the vantage point of customers, unraveling their experiences, preferences, and interactions with digitally transformed services. Understanding customer behavior within this context is pivotal for refining strategies and enhancing service delivery in line with evolving needs. Moreover, integrating the Critical Success Factor theory with complementary theoretical frameworks can unveil a deeper understanding of unexplored variables impacting digital transformation outcomes. This synthesized approach contributes to a more holistic analysis, unveiling intricate relationships between diverse factors that influence successful digital adoption. The combination of these methodologies not only enriches academic understanding but also delivers actionable insights for industry practitioners. It equips them with a comprehensive toolkit to navigate complexities, refine strategies, and optimize the digital transformation process to better cater to evolving customer demands while achieving organizational objectives in an increasingly digital landscape.

The tourism and hospitality sector is experiencing a transformative shift due to digital advancements, requiring tailored educational campaigns. Numerous entities within these industries lack familiarity with its nuances, prompting the need for detailed programs to

highlight the advantages, risks, and tactics for implementation. Effective sensitization is needed to empower stakeholders to grasp the concept of digital transformation and excel in the swiftly changing digital landscape, fostering innovation and enhanced guest experiences.

Governments should also collaborate with telecommunication agencies to enhance internet accessibility and coverage. This partnership enables leveraging the agencies' infrastructure, expertise, and resources to expand network reach into underserved regions. Joint initiatives can foster the development of robust connectivity solutions, including fiber-optic deployment or satellite-based technologies. Such collaboration is vital for bridging the digital divide, ensuring equitable access to reliable internet services, and empowering socio-economic growth in urban and remote areas.

In conclusion, adopting a mixed-method approach, integrating qualitative and quantitative methodologies, offers a comprehensive exploration of the digital transformation in the tourism and hospitality sector. Understanding customer perspectives and combining the Critical Success Factor theory with other frameworks yields a holistic analysis. Tailored educational campaigns are crucial for industry stakeholders to navigate digital shifts, emphasizing the need for government collaboration with telecommunication agencies to enhance internet accessibility. This collective effort fosters innovation, improves guest experiences, and ensures equitable socio-economic growth in urban and remote areas.

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APPENDICES

Appendix A – Letter of Introduction



UNIVERSITY OF GHANA
BUSINESS SCHOOL
DEPARTMENT OF OPERATIONS AND
MANAGEMENT INFORMATION SYSTEMS



UGBS
University of Ghana Business School

Ref. No. INTRO/MIS/1223/12

12th December, 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION – BLESS FRIDOLINE AHIABU (10933974)

This is to introduce to you the above-named second-year MPhil Management Information Systems student from the Operations and Management Information Systems department of the University of Ghana Business School.

Bless is working on a dissertation titled: **Exploring the Impact of Digital Transformation on Ghana's Tourism and Hospitality Industry.**

The thesis is being supervised by Dr. Arbearpong Owusu, a Lecturer at the university of Ghana Business School.

Janet intends to use your organization as her case study organization to gather data.

I would be very grateful if you could provide the necessary information and assistance for the successful completion of this project.

Thank you for your anticipated co-operation.

Yours faithfully,



Prof. Anthony Afful-Dadzie
Head of Department

UNIVERSITY OF GHANA

COLLEGE OF HUMANITIES

Appendix B - Research Interview Guide

INTERVIEW GUIDE

ORDER TO REQUEST FOR A SERVICE

Introduction:

My name is Bless Fridoline Ahiabu, an MPhil student at the University of Ghana Business School pursuing Management Information Systems. I am conducting a study on the Impact of Digital Transformation on Ghana's Tourism and Hospitality Industry.

Overview of the Research:

Digital transformation refers to the process of using digital technologies to basically change how businesses operate and deliver value to customers. It involves adopting new technologies and business models to streamline operations, enhance customer experiences, and create new revenue streams. The purpose of this research is to explore the Impact of Digital Transformation on Ghana's Tourism and Hospitality Industry.

This research seeks to meet the following objectives;

- i. To determine the current state of digital transformation in Ghana's tourism and hospitality industry.
- ii. To identify the enablers, and the challenges hindering the adoption of digital technologies.
- iii. To assess the impact of digital technologies on digital transformation.

You are not obligated to answer any questions you feel uncomfortable with. Thank you for your invaluable contribution to this research. Your participation is crucial for its success. Be rest assured that the information you provide will be used solely for academic purposes.

Contact: 0245897523

Email Address: bfahiabu@ug.edu.gh

Research Supervisor: Dr. Acheampong Owusu

Email Address: AOWusu@ug.edu.gh

SECTION A

Background of participant:

1. Please can you tell me about yourself?
2. Please what is your position and its associated responsibilities in this company?

SECTION B

State of Digital Transformation:

3. Please, what do you know about digital transformation?
4. Have you been using any digital technology in your field of work?
5. How long have you been using these digital technologies in your organization?
6. How common is the use of digital technology in the tourism and hospitality industry?

SECTION C

Digital Culture:

7. Does organizational culture hinder the use of digital technologies in your industry?
8. How has digital culture influenced the digital transformation drive in the tourism and hospitality industry?
9. Does your work environment encourage the use of digital technologies?

SECTION D

Operations:

10. What type of service(s) do you offer to your customers using digital technologies?
11. Please how has the use of digital technologies influenced your work? (For example, it is enhancing efficiency, affordability, easy communication, and service quality, and promoting equitable access, it offers time-saving, and cost-effectiveness)
12. What are the major operational challenges encountered during the adoption and implementation of digital technologies within your organization?
13. How has the use of digital technologies influenced the overall customer experience?

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Digital Technology:

14. What is the impact of the technologies you are using on your business?
15. What factors are promoting the use of digital technologies in your organization?
16. Do you face any difficulties in the use of these technologies?

IT Strategy:

17. Do you have IT/IS officers in your organization?
18. Do you have an IT/IS strategy in your organization?
19. How have digital technologies influenced your overall business strategy?
20. How is your organization aligning its strategies to capitalize on digital opportunities?

SECTION E

Digital Transformation:

21. How do digital technologies facilitate business operations during the digital transformation of organizations?
22. What are the opportunities presented by digital transformation in the tourism and hospitality industry?
23. What are the key challenges and barriers that your organization encountered when implementing digital technologies as part of its digital transformation initiatives?

Concluding Comments:

Do you have any questions or is there anything else you would like to discuss related to the study on the Impact of Digital Transformation on Ghana's Tourism and Hospitality Industry?

Are there any available resources, such as manuals, brochures, or flyers, that can provide further information on digital transformation in your organization?

Is there anyone else you would recommend contacting for additional information or insights on the impact of digital transformation in the Ghanaian tourism and hospitality industry?

Thank you for your time and participation in the discussion. Your responses will be transcribed and sent to you for clarification if needed before finalizing the write-up. If you have any further questions or require any future assistance, please feel free to reach out.



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