THE IMPACT OF HUMAN RESOURCE PRACTICE IN DIGITAL TRANSFORMATION THE CASE OF ZAMZAM BANK

By: Ekram Rahmeto

Advisor: Demeke Chemsisa (PhD)

A Thesis Submitted to the

College of Business and Economics of Addis Ababa University

in partial fulfillment of the requirements for the Degree

Master of Business Administration

May, 2025

Addis Ababa, Ethiopia

Addis Ababa University

College of Business & Economics

THE IMPACT OF HUMAN RESOURCE PRACTICE IN DIGITAL TRANSFORMATION THE CASE OF ZAMZAM BANK

By: Ekram Rahmeto

Id No. GSE/0042/15

Advisor: Demeke Chemsisa (PhD)

A Thesis Submitted to the

College of Business and Economics of Addis Ababa University

in partial fulfillment of the requirements for the Degree Master of Business Administration

May, 2025

Addis Ababa, Ethiopia

Addis Ababa University

College of Business & Economics

THE IMPACT OF HUMAN RESOURCE PRACTICE IN DIGITAL TRANSFORMATION THE CASE OF ZAMZAM BANK

By: Ekram Rahmeto

Approved by Board of Examiners

Demeke Chemsisa	______________	________________
Advisor	**Signature**	**Date**
TILAHUN TEKLU______	**Signature** ______	
Internal Examiner		**Date**
ANDINET WORKU_____	______________	________________
External Examiner	**Signature**	**Date**

Declaration

I, the undersigned, hereby declare that this thesis entitled, **" The Impact Of Human Resource Practice In Digital Transformation The Case Of Zamzam Bank"** is my original work, prepared under the guidance of my advisor Demeke Chemsisa, (PhD). And has not been presented for a degree or any other award in Addis Ababa University or any other institution before. All source of materials used for the thesis have been duly acknowledged.

Declared by:

Ekram Rahmeto ____________________ May, 2025

Signature Date

Confirmed by Advisor:

Advisor: Demeke Chemsisa (PhD) ______ _ May, 2025

Signature Date

Certification

I certify that I have read this thesis entitled " The Impact Of Human Resource Practice In Digital Transformation The Case Of Zamzam Bank” by Ekram Rahmeto. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Master of Business Administration.

Advisor: Demeke Chemsisa (PhD) ___ __________

Addis Ababa University Signature

Acknowledgments

First and foremost, I would like to express my sincere gratitude to my advisor, Dr Demeke Chemsisa, for his guidance. I appreciate his willingness to share his time and insights with me.

I would also like to extend my heartfelt appreciation to my family members, whose constant encouragement and unwavering belief in me have been the driving force behind this endeavor.

Finally, I would like to acknowledge the support and cooperation of all the individuals and organizations who have directly or indirectly contributed to the successful completion of this research project.

Table of Contents

List of Figures

Table of tables

List of Acronyms

HR- Human Resources

NBE - National Bank of Ethiopia

S.C. - Share Company

Sharia - Islamic law governing banking and finance

Abstract

The purpose of this study was to examine the impact of HR practices on digital transformation outcomes in the case of ZamZam Bank, the first interest-free bank in Ethiopia. A structured questionnaire and systematic random sampling were used as instrument and technique respectively. The sample for the study was comprised of 261 respondents representing different functions of the bank. Of these, 236 questionnaires had been duly completed and returned, resulting in a 90% response rate. Quantitative data were analyzed using correlation and multiple regression analysis through SPSS version 25. The findings revealed that Digital Skills Proficiency, Employee Engagement, and Alignment of HR Policies with digital objectives significantly and positively influenced digital transformation outcomes, with p-values less than 0.001. Notably, Training and Development Programs and Talent Acquisition Strategies did not show statistically significant effects. Key findings indicate that enhancing digital skills and fostering employee engagement are critical for successful digital transformation. The study concludes that ZamZam Bank should focus on aligning its HR practices with digital transformation goals. By prioritizing employee engagement and ensuring that HR policies support these objectives, the bank can create a more adaptive and innovative workforce. This strategic alignment will not only facilitate effective digital transformation but also strengthen the bank's competitive position in the Islamic banking sector.

Keywords: Islamic banking, Digital transformation, Human resource, Digital technologies

CHAPTER ONE

1.1. Background of the Study

The late 20th century witnessed a significant expansion of digital products and services, fundamentally transforming communication and operational efficiency across various sectors. In banking, this digitization has revolutionized customer interactions, shifting from traditional mass media advertising to convenient online and mobile banking services that enable transactions anytime, anywhere (Schallmo, Williams, & Boardman, 2017). The integration of advanced technologies such as data analytics and artificial intelligence has further enhanced customer care by allowing for personalized services, real-time support, and tailored financial products. These digital tools have streamlined operational activities through automation and improved risk management, fostering innovative partnerships with fintech companies (Hilbert, M., 2020).

As financial service providers navigate this evolving landscape, the necessity for a customer-centric approach becomes increasingly apparent. Banks are compelled to deliver high-quality financial services while remaining competitive in a dynamic environment (Khanchel, H., 2019). Islamic banking institutions, which adhere to Sharia principles that prohibit interest (Riba) and promote ethical investments, offer unique solutions tailored to the religious beliefs of the Muslim community. By providing Sharia-compliant savings accounts and investment funds, these banks not only support financial inclusion but also contribute to economic growth by funding socially responsible initiatives (Desky, H. & Mauliana, 2022).

ZamZam Bank S.C., Ethiopia's first full-fledged interest-free bank, was established to promote financial inclusion among individuals traditionally excluded from conventional banking due to religious beliefs. Operating under Sharia principles and licensed by the National Bank of Ethiopia, ZamZam Bank prioritizes technological innovation and superior customer service, targeting the growing demand for Islamic finance and aiming to contribute to Ethiopia's economic development (Berta, A., 2022). ZamZam Bank has established itself as a leader in Ethiopia's Islamic banking sector by expanding its branch network and enhancing its digital services. The bank focuses on addressing the needs of customers seeking interest-free banking options, continuously adapting to technological advancements and customer preferences. This strategic approach has enabled ZamZam Bank to effectively meet the growing demand for Sharia-compliant financial products.

A key success factor in the digitalization of Human Resource Management (HRM) is the enhancement of Digital Skills Proficiency through focused training and development initiatives. Effective talent acquisition strategies aim to recruit individuals with strong digital competencies, while the alignment of HR policies with digital transformation goals ensures that HR services support broader organizational strategies. Furthermore, employee engagement and satisfaction are vital for promoting acceptance of new technologies. By integrating these elements, ZamZam Bank can successfully navigate its digital transformation, enhancing its capacity to adapt to industry changes and maintain competitiveness (Mosca, M., 2023). This study examines how these HR practices can effectively support ZamZam Bank's digital transformation efforts.

1.2 Statement of the Problem

The banking sector is undergoing a significant digital transformation, presenting challenges for Islamic banks to adapt while adhering to Sharia principles. Employing skilled HR professionals is essential, as employees' digital competencies are crucial for successful digital initiatives. While previous research has focused on technology adoption and operational efficiency in banking, there is a notable gap in studies examining the role of HR practices in Islamic banking during this transformation.

This study aims to address this gap by exploring how HR practices can support ZamZam Bank's digital transformation efforts, with potential insights for other Islamic financial institutions. The research will focus on evaluating employee digital skills, enhancing talent acquisition strategies, assessing the impact of training on performance, boosting employee engagement, and aligning HR policies with digital transformation objectives. These objectives will allow the current research a great deal of trust that is very crucial for the success of the banking industry by offering more substantial competitive advantages and perform

1.3 Research Questions

In order to achieve the purpose of the research and explore the issues mentioned in the statement of the problem, the study raised the following research questions:

1.3.1 General question

The general research question is:

How can human resources support Islamic banks in adapting digital transformation?

1.3.2 Specific questions

1. How can we assess employees' digital skills for targeted training?
2. How effective are the strategies for attracting and keeping digital talent?
3. How do training programs impact employee performance in digital projects?
4. How well are HR policies in Islamic banks aligned with digital transformation goals?
5. How well are HR policies in Islamic banks aligned with digital transformation goals?

1.4 Objectives of the study

1.4.1. General Objective

The general objective of the study was to examine how HRs can help Islamic banks successfully adapt digital transformation

1.4.2. Specific Objectives

The specific objectives of the study are:

- ➢ Evaluate employees' digital skills to identify areas for targeted training.
- ➢ Analyze the effectiveness of strategies for attracting and retaining digital talent.

- ➢ Examine how training programs influence employee performance in digital initiatives and align with transformation goals
- ➢ To evaluate how well HR policies in Islamic banks align with digital transformation goals.
- ➢ To identify the extent to which HR policies support the strategic objectives of digital transformation in Islamic banks.

1.5. Significance of the study

One of the reasons why the study of HR management as a support to Islamic banking in becoming highly important is that it has the potential to enhance the performance and flexibility of Islamic banks in a financial environment that is being swiftly changing. This study can help shed light on the employees' skills, engagement, and performance, which in return bring the success of digital efforts. Besides, this research can not only determine whether there are any gaps in employees' digital skills but also seek to understand the roots of these shortcomings in their digital-based training programs. This study provide valuable insights and recommendations for ZamZam Bank to leverage digital transformation effectively and strengthen its position in the market.

1.6. Scope of the study

The scope of the study was limited to how HRs can assist Islamic banks to adapt to digital transformation. The study was limited to Islamic banking and didn’t look digital transformation in another sector. The investigation was undertaken ZamZam Bank as a case study, and the results may not apply to other financial institutions. The research also didn’t touch on technical area of digitalization but instead will elaborate on Evaluation of Employee Skills, Talent Strategies Expansion, and impact of training.

1.7. Limitation of the study

This study's focus on specific variables may limit the breadth of insights into digital transformation. Further research can explore additional variables, such as organizational culture, as predictors of digital transformation success. Additionally, employing qualitative research approaches could provide deeper insights into the experiences and perceptions of employees regarding digital initiatives.

1.8. Organization of the Study

The study is organized into four chapters, each fulfilling a specific purpose. Chapter 1 provides a comprehensive introduction to the study, including background information, research questions, and the study's objective. Chapter 2 conducts a thorough review of the literature, focusing on existing knowledge on digital transformation, customer experience, and Islamic banking principles. Chapter 3 explores the study's methodology, discussing data sources and model specification.

CHAPTER TWO

Review of Related Literature

2.1. Theoretical Literature Review

2.1.1 About ZamZam bank

ZamZam Bank S.C. has made history by becoming the first bank to receive a license from the National Bank of Ethiopia to operate as a full-fledged Interest-Free Bank in the country. The establishment of ZamZam Bank aims to promote financial inclusion, especially for segments of society previously excluded from the financial system due to religious beliefs or other factors.

At its inception, ZamZam Bank successfully raised a subscribed capital of Birr 1.683 billion and a paid-up capital of Birr 872 million from its 11,200 shareholders. Drawing inspiration from the renowned ZamZam Holy Water that brought life to the arid lands of Makkah, ZamZam Bank is committed to ensuring sustainable economic growth. With a significant responsibility on its shoulders, ZamZam Bank is driven by the strong commitment of its shareholders, board of directors, management, and professional employees. The bank's primary focus areas from day one have been Shariah compliance, adoption of advanced technology, and delivering excellent customer service. Currently, ZamZam Bank is forging ahead with plans to expand its branch network within the capital city and other regions of the country. Concurrently, the bank is implementing digital solutions that have a far-reaching impact on its valued customers, enabling it to stay ahead of the curve in the rapidly evolving banking landscape. (https://ZamZam Bank.com/company-profile/)

2.1.2. Definition of the Concept Digital Transformation

Digitization is the foundational process of converting analog information or physical items into a digital format. This involves creating a digital representation of something that was originally non-digital, such as scanning paper documents to create PDFs or transcribing handwritten notes. Digitization essentially makes information accessible and usable within the digital world and is a crucial first step in a broader transformation (Manyika et al., 2021).

Building upon digitization, digitalization leverages these digital technologies and digitized data to fundamentally transform processes, improve efficiency, and create entirely new ways of operating (Westerman et al., 2022). Digitalization is not merely about having digital information; it involves actively using digital tools to enhance and optimize workflows, such as implementing Customer Relationship Management (CRM) systems or using data analytics to understand customer behavior.

In essence, while digitization focuses on converting information from analog to digital, digitalization emphasizes using those tools and data to improve and transform operational effectiveness (Matt et al., 2021). This process leads to better, faster, and more efficient outcomes by streamlining processes, enabling data-driven decision-making, and fostering innovation.

The term "digital transformation" is a term used to define the process of implementing digital technologies into the different segments of the organization's operations, procedures, and plans that will cause a significant change to the way the enterprise functions and generates value to its clients. In the era of rapid digital change that we are living through, this method includes the application of digital tools and technology to enhance the productivity, improve the customer experience, create innovation, and hence keep the business ahead of its competitors. (Desky, H., & Maulina, I.,2022)

Digital transformation, also known as digitalization, is the wide use of digital technologies in various societal sectors such as economics, education, management, family, and culture. It represents changes brought about by the common acceptance of digital technology in all areas of human existence, which has had a significant impact on people's perspectives and information technologies. (Mirzagayeva, S., & Aslanov, H. ,2022).

Digital transformation is a term that denotes the speed and intensity of changes introduced in operations, procedures, skills, and structures to make full use of digital technologies. The intentional and strategic use of digital tools that contribute to innovation is one of the main points in the so-called digital revolution. Enhancing customer interaction, shrinking operational costs, adding new revenue through business diversification, and optimizing business portfolio are examples of such digitally enabled value creation. This is a demonstration of a smart contract in action, which was more comprehensive than anything we have ever done before. (Vial, G. ,2018)

The integration of digital technologies into various parts of a company to somewhat alter the mindset of people and change the way the company delivers services to its clients is known as the "digital transformation" process. It is not only the implementation of new technologies but also the exchange of the organization and the strategy, both of which are necessary to enhance the level of creativity, the better the production of newer products, the better the relationship with the consumer. (Diener, F., & Špaˇcek, M., 2021). Nowadays, consumers are becoming more interconnected and powerful, which is also a factor that depends on the level of customer appreciation. In addition, companies must be aware that the competition is always changing, and they must be ready to adapt and innovate to stay competitive in the markets. (Rogers, D. L., 2016)

2.1.3. Digital Transformation in Banking Industry

Digital transformation in banking means the use of information technology for the introduction of new IT-based online services that can boost the company's competitive edge. To be able to navigate the currents of changing consumer preferences and market forces, this transformation process is crucial for companies. Businesses should look closely at the dangers, disputes, and socio-technical difficulties associated with the digital transformation of banking by adopting a service-dominant logic perspective, which perceives clients as co-creators of business value. (Arvidsson, N, et.al, 2019)

Digital transformation is the key process for banks to survive in the rapidly changing technology environment of today. The time has come for banks to employ digital technologies not only for the purpose of retaining competitiveness but also for the purpose of meeting the ever-changing needs of their customers. Financial institutions have been facing pressure to reshape their traditional business operations and integrate new digital solutions to disrupt, learn, satisfy customers while improving efficiency and productivity. (Diener, F., & Spacek, M., 2021)

Through digital transformation, banks can now turn every customer into a personal project of theirs by analyzing customer data and thereby improving the entire banking experience. Today's customers want more than functionality; they want a style that is both easy, functional, and customized, which is why banks are resorting to digital tools such as mobile applications to meet these expectations efficiently and to provide services on demand anytime and anywhere. (Osei, K.,2023)

Digital Islamic banks have now done away with physical branches and instead offered seamless, integrated digital experiences through their websites and mobile apps with the use of mobile technology to offer personalized and convenient services anytime. The integration of social media becomes a means of customer relationship building; moreover, the latter has also contributed data analytics to personalization and insights, yet security and privacy are still the main priorities. Digital banks thrive by adopting a digital-first philosophy, re-imagining the old approaches, and creating new services built on the customer experience and data, which are supported by agile methods. (Shehadeh, M., et.al, 2023)

Some key technologies that Islamic banks are adopting to facilitate their digital transformation include artificial programming interfaces, biometric identification, and mobile wallets. These technologies empower banks to provide high-tech services, enhance customer satisfaction, and streamline operations. However, the sector also faces challenges such as HR shortages, architectural barriers, and deficiencies in digital infrastructure (Desky, H., & Maulina, I. 2022). Technology acceptance plays a crucial role for organizations striving to improve efficiency, enhance customer satisfaction, and foster innovation. By utilizing digital tools and platforms, banks can automate operations and create new products that meet changing customer needs, thereby strengthening their competitive advantage and positioning themselves for long-term success (Sharma, R., & Mishra, R. 2014).

ZamZam Bank is actively undergoing a significant digital transformation aimed at enhancing financial inclusion and addressing the evolving needs of its customers. With a vision to become the leading Sharia-compliant digital bank in Africa by 2030, the bank is leveraging advanced technologies, including those mentioned, to align with innovative business models. Key initiatives include the ZamZam Mobile App, which allows customers to conduct transactions even without internet access, and Ansar Digital Financing, Ethiopia's first fully Sharia-compliant digital financing service. This service focuses on improving access for Micro, Small, and Medium Enterprises (MSMEs), particularly benefiting women and informal sector workers through fast, secure, and collateral-free financing options. Additionally, ZamZam Bank offers mobile banking services accessible via USSD, enabling customers to perform various transactions easily. The introduction of debit cards, including the instant card issued upon account opening, further enhances customer convenience. By embracing these technologies, ZamZam Bank not only improves its service delivery but also navigates the challenges inherent in the digital transformation journey, positioning itself for future success in the competitive banking landscape.

2.1.4. Human Resource and Digital Transformation

It is highly accepted that one of the fundamental factors of success in the business world today is the connection between HR infrastructure and digital transformation strategies. Digital transformation is more than just updating technology, it is also about key changes in people's attitude, employee skills, and management practices. In general, the learning process of a digital business is based on physical assets like IT infrastructure and capital (HR with technical and management qualifications) as well as the ones, like knowledge and customer focus (Nicolás-Agustín et al., 2021)

The HR as a digital transformation infrastructure is gaining acceptance. In the above context, HR is regarded as one of the key factors in a company's success on the modern business landscape, Digital transformation refers not only to new technologies but also to the changes in organizational culture, employees' competencies, and management practices, etc. To illustrate, digital transformation is a result of a blend of various types of resources IT infrastructure, HRs with technical and management expertise, and intangible assets such as knowledge and customer orientation (Nicolás-Agustín et al., 2021)

Digital technologies in the area of HR management is leading to changes of traditional practices and bringing in new strategies that increase workforce efficiency and employee engagement. This change is not only speeding up HR processes but also encourages a culture of learning and adaptability among employees. New HR strategies that put the digital skills of employees to the center and efficient talent management are critical for organizations to become successful in the digital age (Bahiroh, 2024).

2.1.5. Human Resources Functions Supporting Digital Transformation

1. **Digital Skills Proficiency**

The necessity of digital expertise in the banking industry is of very importance, especially in the case of Islamic banking, where technology serves as a means for better service provision and the efficiency of the operations. Digital skills are not only for the employees to move along the complexities of digital banking platforms but also to meet customer expectations in a rapidly changing financial landscape (Sutikno et al., 2022). previous Research indicate that the present level of employees' digital skills in Islamic banks is usually less than required for executing effective digital transformation. Employees in Islamic banks must have a thorough knowledge of both Islamic finance principles and digital technologies to ensure compliance and operational success (Rianti & Syamlan, 2022).

2. **Training and Development Programs**

The study suggests that well-organised training can enhance productivity and help employees to get used to digital transformation (Firdiansyah, 2022). To gain the learning and development benefits of the digital transformation, it is important to incorporate practical training, give present-day learning opportunities and make sure that the training content is along with the organisation's strategic objectives (Sayakhmad, 2022). The Islamic banks are aware of the significance of providing training programs which are strictly based on the competencies that the staff members should have in order to use digital banking technologies safely and precisely (Tiara et al., 2023). As a rule, these programs' success is evaluated by the growth in employee performance and their self-confidence in the handling of digital tools.

3. **Talent Acquisition Strategies**

One of the strategically most significant processes in the digital transformation of Islamic banks is the attraction and retention of digital talents. One of the acquisition strategies concerns the establishment of an employer brand that showcases not only what the company stands for but also the career possibilities available to showcase the unique values and opportunities within Islamic banking (Handayani, 2023). The impact of these strategies on innovation and digital initiatives is so phenomenal that organizations that are able to attract people with the right skills are more likely to produce cutting-edge technologies and improve service offerings (Khalid et al., 2018).

4. **Employee Engagement and Satisfaction**

Employee engagement is actually very important when trying to make digital doings possible. The research has been done and the conclusion is that the better employees are satisfied and the higher the productivity, especially in the digital environment (Zouari & Abdelhedi, 2021). Excited employees are sure to a larger extent help with delegating the digital conversion and as they already feel like they are co-owners of the company and are already committed to the goals of the aforementioned bank, they will work even harder(Firdiansyah, 2021). Improving the engagement of employees has been a debatable issue for few years now and has been widely discussed among researchers and scholars. The main goal of such research is to make employees able to direct their attention towards the right directions. The main solution here is to make people realize that they are not isolated individuals and that in order for the organization to run effectively, people need to work together, bring up their problems, and solve each issue collectively.(Khalid et al., 2018).

5. **Alignment of HR Policies with Digital Transformation Goals**

The values of digital transformation by HR policies are crucial to the success of Islamic banks in the virtual era. HR practices should align with the strategic objectives of digital transformation by making the recruitment, training, and performance management processes that encourage a digitally skilled workforce the focus. (Firdiansyah, 2021) An exploration of existing HR habits suggests that several Islamic banks are still struggling with the issue of matching the policies with the rapidly changing digital environment (Sayakhmad, 2022).

2.2 Emperical literature review

Digital skills awareness is the basic building block for the successful digital revolution of Islamic banks. Research shows that the evaluation of current digital skills in relation to future needs is a key step to discovering deficits and arranging the necessary training (Boufounou et al., 2022). This is especially the case in Islamic finance where employees must be skillful not only in computing technologies, but also in how these tools are compatible with the principles of Islamic finance. A detailed examination of digital knowledge allows HR the space to provide growth and learning opportunities to the employees, thus easing their digital transforming environments which would otherwise be quite complicated.

Training and development programs are essential in employees with the appropriate skills for digital transformation. Boufounou et al. (2022) conducted a survey of 200 employees in three Islamic banks in Morocco and found a significant gap between current digital skills and the skills required for future digital initiatives. Their study revealed that employees lacked proficiency in areas such as data analytics and cybersecurity, which are necessary for the banks' digital transformation strategies. Employee performance in digital initiatives has significantly improved due to development programs led by experts in the field (Boufounou et al., 2022). Employee engagement and satisfaction, for example, significantly increase in companies that invest in comprehensive training programs. These gains are critical for the effective execution of digital strategy. Employee performance and preparedness can be further improved in the context of Islamic banking with customized training programs that include Sharia-compliant digital activities as the study suggests a strong correlation between training opportunities and employee morale.

Talent acquisition is the next important part of HR's future in digital transformation. The recruitment and retention of digital talent are crucial for banks to stay in the ever-growing technological landscape (Prokopenko et al., 2022). Prokopenko et al. (2022) explored talent acquisition strategies in the banking sector in Russia and found that banks that actively recruited talent with digital expertise were more successful in implementing their digital transformation initiatives. Their research involved analyzing recruitment practices and digital project outcomes in 15 major banks. However, it is important to note that these strategies are not always effective; specifically, according to a research on the banking industry in Bangladesh, it was found that HRD practices for talent acquisition did not significantly impact employee performance, which means that the only thing of bringing people in is bringing them in without the right context for growth.("Impact of Talent Management on Employee Performance in the Banking Industry of Bangladesh", 2022). This study, based on a survey of 150 bank employees in Bangladesh, found no significant correlation between talent acquisition practices and employee performance, suggesting that other factors, such as training and development opportunities, might play a more crucial role. Simply attracting talent is insufficient; fostering their development and engagement is equally important.

Employee engagement and satisfaction are necessary for accepting and adopting to changes which will have positive outcomes. Digital transformation cannot be the successful factor without the active participation and satisfaction of the employees who are welcome to embrace the new technology with a positive attitude. (Halim, 2023). Halim (2023) conducted a qualitative study involving interviews with 30 employees in Islamic banks in Indonesia. The study revealed that employees who felt valued and supported by their organizations were more receptive to new technologies. For Islamic banking, the sheria and ethical factors are very important as they ensure the establishment of a working place that is both supportive and in line with the workers' values that can boost their dedication to digital programs. This similarity is absolutely imminent in the whole process of a workplace transformation into the digital era in accordance with the workforce, thus resulting in a smoother process of implementation.

The alignment of HR policies and digital transformation goals is strictly important for the formation of a strategy that is fully supportive of the organizational objectives. It is a must for HR to include digital transformation in its main policies and practices. (Nadkarni & Prügl, 2020). Nadkarni & Prügl (2020), in their conceptual paper, argue that HR departments must play a strategic role in aligning HR policies with digital transformation goals. They emphasize the importance of integrating digital skills development into performance management systems and recruitment strategies. This connection guarantees that HR functions, including recruitment, training, and performance management, are in harmony with the digital transformation goals. For Islamic banks, this means developing HR policies that not only promote digital skills but also respect and incorporate Islamic values, thus ensuring a holistic approach to transformation. Furthermore, the execution of advanced technologies, such as artificial intelligence and big data, in financial organizations, brings an advantage in terms of HR (Kitsios & Kamariotou, 2021). Kitsios & Kamariotou (2021) explored the application of AI and big data in HR departments within the financial sector and found that these technologies can significantly improve HR processes, such as recruitment and talent management.

In conclusion, digital transformation in Islamic banks requires a multi-faceted approach. This review has highlighted the importance of digital skills assessment, targeted training and development programs, strategic talent acquisition, employee engagement and satisfaction, and the alignment of HR policies with digital goals. Future research could explore the specific challenges and opportunities associated with implementing digital transformation in different contexts within the Islamic banking sector.

2.3 Research Hypothesis

Hypothesis 1: Employees' digital skills can be evaluated to identify specific areas that require targeted training.

Hypothesis 2: Strategies for attracting and retaining digital talent are effective in supporting digital transformation.

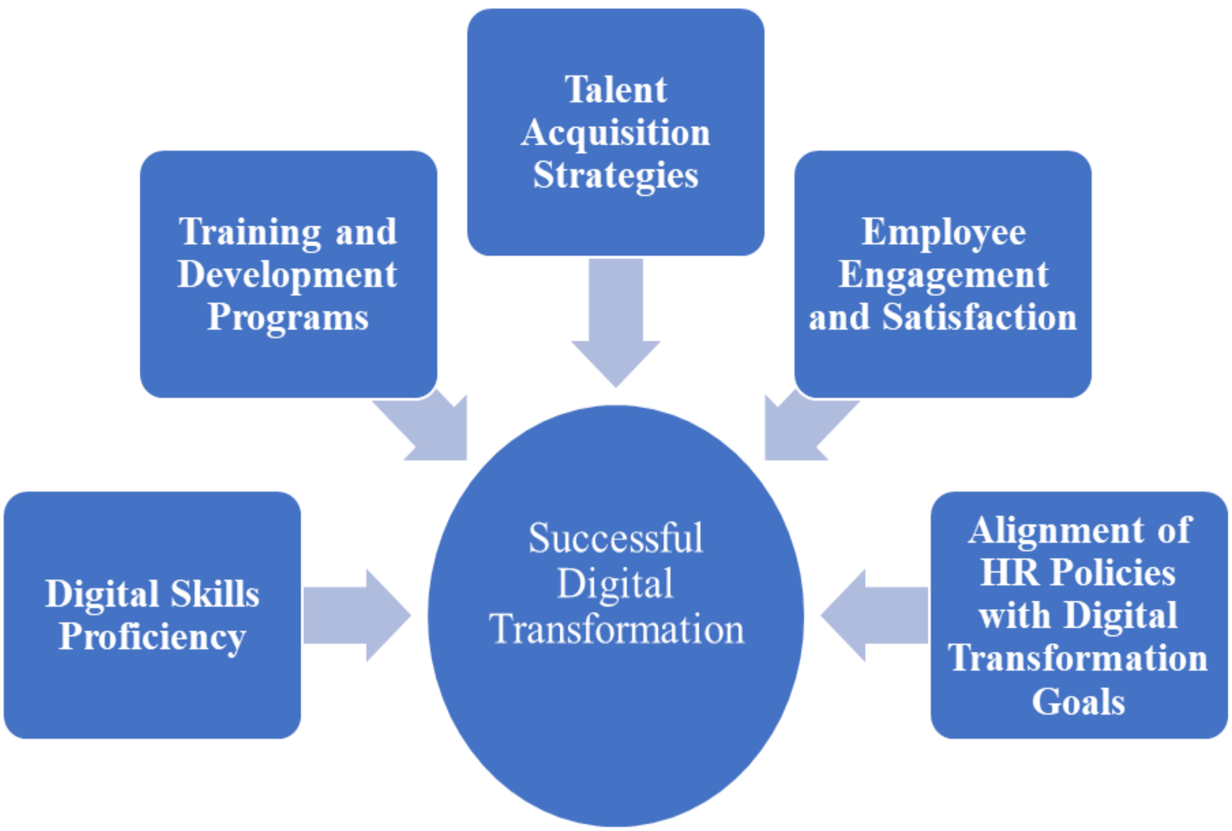
Hypothesis 3: Training programs positively influence employee performance in digital initiatives and align with the organization's transformation goals.

Hypothesis 4: HR policies in Islamic banks are effectively aligned with digital transformation goals.

Hypothesis 5: HR policies in Islamic banks are effectively aligned with digital transformation goals.

2.4. Conceptual framework

Figure 1: Conceptual framework of the study



x

CHAPTER THREE

Research Methodology

This chapter explains the methodological framework employed for data collection and analysis. The research design, data types and sources, methods of data analysis and interpretation, model formulation and specification, validity of the Study and data analysis and interpretation methods are outlined.

3.1. Research Design

The study will utilize a Descriptive research design to comprehensively analyze ZamZam Bank's digital transformation journey. By meticulously documenting and analyzing these elements, the research can generate valuable insights that will empower ZamZam Bank to further enhance its competitive edge within the Islamic banking sector. The population of interest is mainly focused on selected ZamZam branch and head office staff.

3.2. Sampling design

The research will use purposive sampling to select participants with expertise and experience in Islamic banking. The sample size for this study was computed using the following formula provided by Yamane (1967).

$n = N/1 + N(e)2$

Where: n = The sample size

N = The population size

e = The level of precision

Hence, with a level of precision equal to 5% the sample size for the study becomes 261. This sample will be distributed to ZamZam Bank Staff.

3.3. Data Collection

The study will employ a qualitative research method approach to data collection. The primary data will be gathered through utilizing structured questionnaires. The survey asked questions using a 5-point Likert scale. Data collection will be carried out in a structured questionnaire to employees of ZamZam bank. The questionnaire will cover areas such as digital skills proficiency, training and development programs, talent acquisition strategies, employee engagement and satisfaction, and alignment of HR policies with digital transformation goals. The targeted respondents were Branch managers, IT professionals, Customer service representatives and other relevant staff. The study will also utilize secondary data sources such as ZamZam Bank documents, NBE guidelines, and previous studies.

3.4. Data Analysis

To gain a deeper understanding of how ZamZam Bank can leverage digital transformation to strengthen its competitive position in the market, The analysis approach utilized includes several key methodologies. First, descriptive analysis was employed to summarize demographic data and provide an overview of employee responses regarding digital skills and HR practices. Reliability analysis, using Cronbach's Alpha, assessed the consistency of the questionnaire items. Pearson's correlation analysis examined the relationships between independent variables, such as digital skills proficiency, training and development programs, talent acquisition strategies, employee engagement and satisfaction and alignment of HR policies with digital transformation goals with the dependent variable of successful digital transformation. Additionally, linear regression analyses evaluated the impact of various independent variables on successful digital transformation, while also conducting tests for multi-collinearity and normality. Together, these methods formed a comprehensive framework for analyzing the role of HRs in facilitating digital transformation at ZamZam Bank.

3.5. Ethical Consideration

The research will ensure the highest standards of research ethics are upheld throughout the data collection and analysis process. Informed consent will be obtained from all participants, confidentiality and anonymity will be ensured for all respondents.

CHAPTER FOUR

Findings and Discussion

In this chapter, we present the analysis and discussion of findings from data collected through questionnaires to evaluate the role of HRs in facilitating digital transformation at Zamzam Bank. We gathered data from 43 out of the 90 branches of Zamzam Bank. This choice was made due to accessibility issues and challenges in distributing questionnaires to all branches.

The selected branches were chosen to ensure a good mix of the bank's operations while making it easier to collect responses. By focusing on these accessible branches, we aimed to understand how HR practices support digital transformation initiatives at Zamzam Bank. This approach allowed us to gather valuable insights into the important role of HR in driving digital change within the banking sector.

4.1. Response Rate

To gather data for this study on the role of HRs in facilitating digital transformation at Zamzam Bank, Google Forms was utilized to distribute questionnaires to employees across 43 selected branches and the head office. A total of 261 questionnaires were distributed, and 236 responses were received. All returned questionnaires were properly filled out and included in the analysis, resulting in a high response rate of approximately 90%. This method allowed for efficient data collection and real-time analysis of responses, enhancing the overall research process. The response rate for the study is summarized in the table below.

Table 4. 1 Questionnaire response rate

Sample	Number	Percent
Distributed Questionnaire	261	100%
Returned Questionnaire	243	93%
Discarded Questionnaire	8	3%
Workable Questionnaire	236	90%

Source: Own survey, 2024

4.2. Description of Respondents

The questionnaire of the study was distributed to the employees of ZamZam bank. The demographic profile of respondents in terms of gender, educational background, years of employment and current organizational position is summarized in table 4.2. A discussion of each demographic variable of respondents is presented after the table.

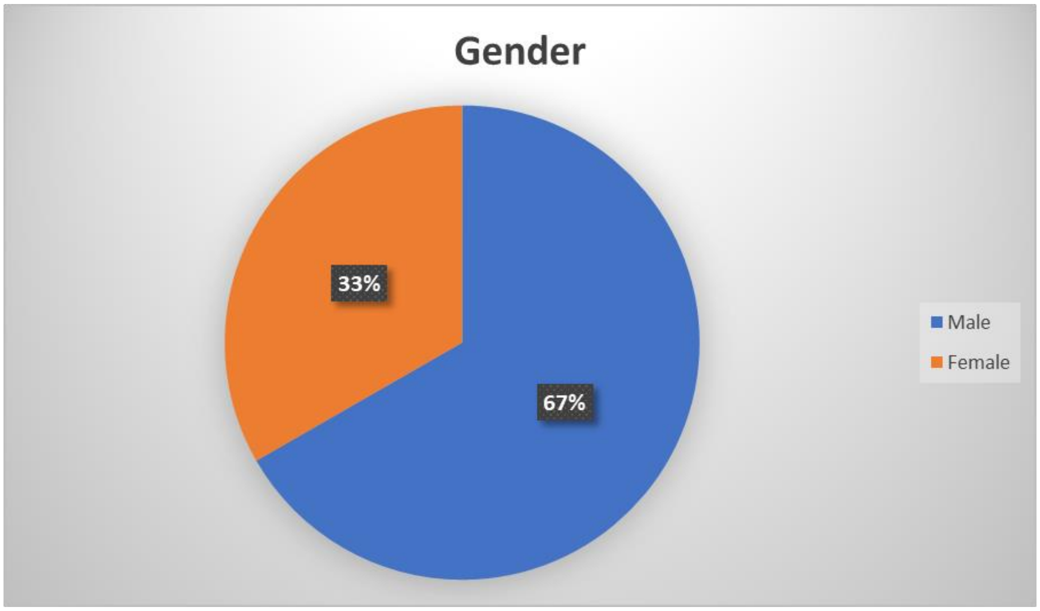
Table 4. 2 Demographic profile of respondents

S. N	Characteristics	Categories	Frequency	Percent
1	Gender	Male	157	66.7
		Female	79	33.3
2	Educational Level	Degree	119	50.3
		Masters	117	49.7
3	Industry experience	0-5 years	168	71.3
		5-10 years	51	21.5
		10-20 years	17	7.2
4	Current Position	Branch managers	25	10.8
		HR	8	3.6
		IT Professional	12	5.1
		Customer service representatives	165	69.7
		Other_position	26	10.8

Source: Own Survey, 2024

As it can be observed from figure 4.1, the majority of respondents in the survey are male with a frequency of 157 (66.7%) and the remaining 79 are female constituting 43.3%. This figure reflects that the workforce of banks is dominated by male employees.

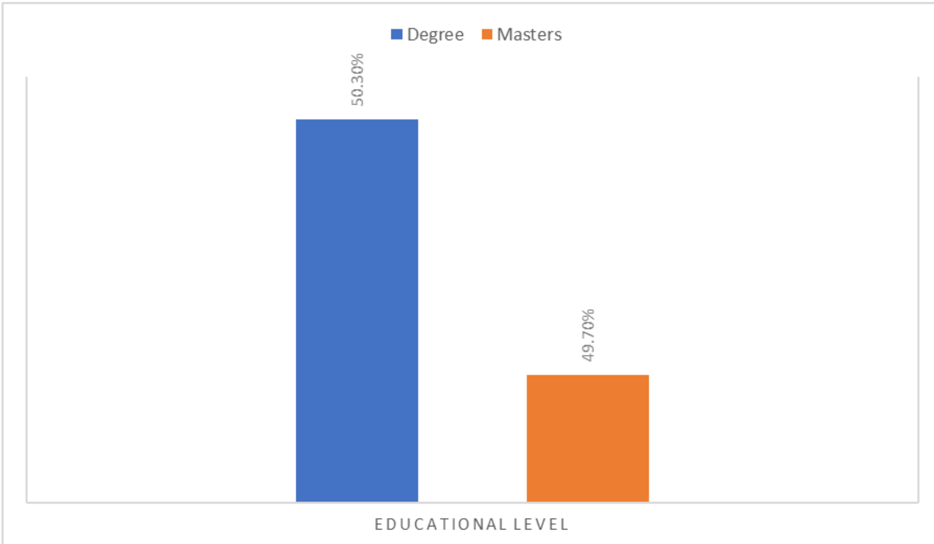
Figure 2 Gender distribution of respondents



Source: Own Survey, 2024.

With regards to respondents of educational level, majority of the respondents accounted for 50.3% hold their first degree, while the rest 49.7% hold master degree. Regarding with the educational level analysis shows that all the respondents have adequate educational background to clearly understand the concepts rose in the questionnaire and give appropriate response.

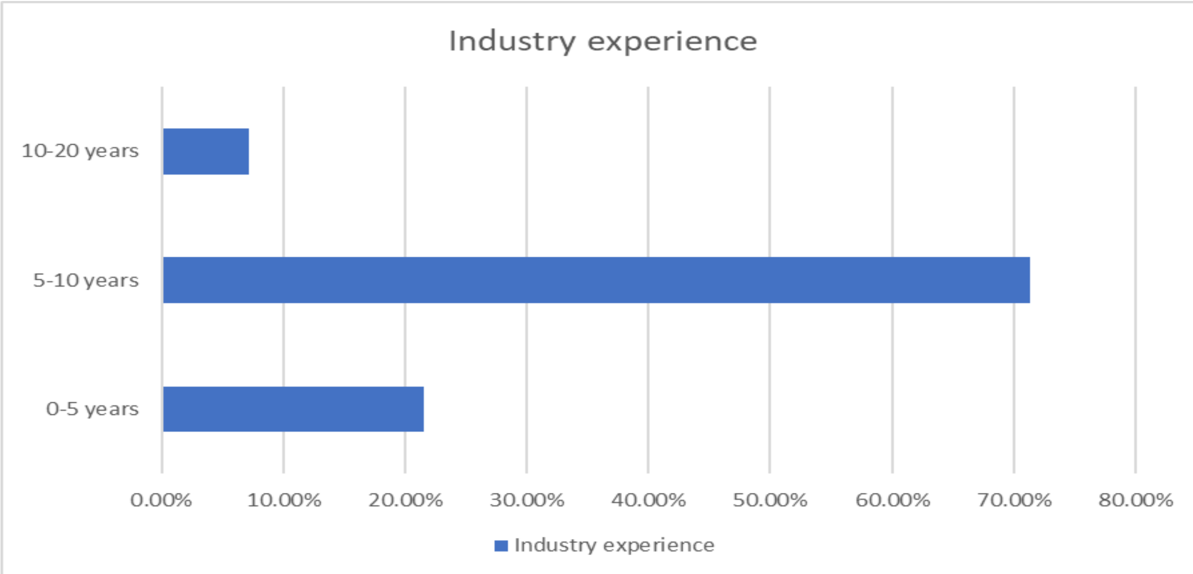
Figure 3 Level of Education



Source: Own Survey, 2024.

Out of the total respondents, the majority 168 (71.3%) have served their organizations from one to five years. The second largest group 51 employees (21.5%) have been employed in ZamZam banks for the last five to ten years. 7.2% or 17 employees have service years of ten to twenty years.

Figure 4 Industry Experience



Source: Own Survey, 2024.

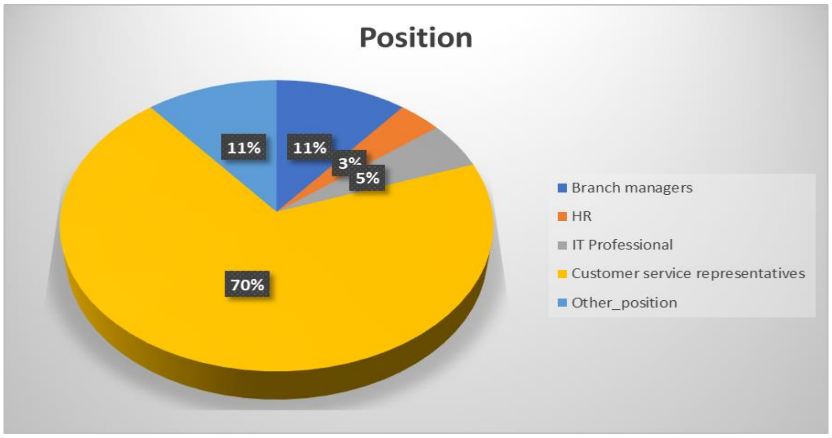
The largest group within the organization, customer service representatives play a crucial role in the digital transformation process.Their high percentage (69.7%) or 137 highlights their importance in implementing and adapting to new digital tools and processes.

Branch managers, comprising 10.8% of the respondents, serve as vital links between upper management and operational staff. They are responsible for overseeing the integration of digital strategies at the branch level, ensuring that their teams are equipped to embrace new technologies and practices.

With only 5.1% representation, IT professionals are critical to the technical aspects of digital transformation. Their expertise is necessary for developing and maintaining the digital infrastructure that supports various banking operations and enhances customer experience (Shumba, 2023).

HRs, accounting for 3.6% of the respondents, play a strategic role in facilitating training and development programs that prepare employees for digital transformation. HR's involvement is crucial in fostering a culture that embraces change and innovation (Nesindande et al., 2024

Figure 5 Position



In "Other Positions" category, which includes 21 respondents (10.8%), represents a diverse group of roles not specifically categorized as Customer Service Representatives, Branch Managers, IT Professionals, or HRs. This group encompass various functions within the bank that contribute to its operations but do not fall into the primary categories listed.

Table 4. 3Descriptive Statistics on Digital Skills Proficiency

	N	Minimum	Mean	Std. Deviation
I am confident in using digital tools and technologies relevant to my job.	236	1	2.04	1.170
I have gained adequate training to develop my digital skills.	236	1	2.47	1.069
I usually use digital tools to improve my work	236	1	1.99	.845
My current digital skills meet the demands of my role	236	1	2.08	.895
I know the latest digital tools and technologies available in the banking sector	236	1	2.14	1.090
Digital_Skill_Proficency	236	1.00	2.1466	.71223
Valid N (listwise)	236			

Source: Own Survey, 2024

The data reveals that respondents have a low average confidence in using digital tools relevant to their jobs, with a mean score of 2.04 and a standard deviation of 1.170, indicating considerable variation in responses. Additionally, employees feel slightly below average regarding the adequacy of their training for developing digital skills, as reflected in a mean of 2.47 (Std. Dev. = 1.069). The use of digital tools to enhance work performance is also infrequent, with an average score of 1.99 (Std. Dev. = 0.845), suggesting that employees rarely utilize these tools. Furthermore, respondents believe their current digital skills do not sufficiently meet their job requirements, as shown by a mean of 2.08 (Std. Dev. = 0.895). Employees report having limited knowledge of the latest digital tools available in the banking sector, with a mean score of 2.14 (Std. Dev. = 1.090). Overall, the average score for digital skills proficiency is 2.15 (Std. Dev. = 0.712), indicating a significant need for improvement in the digital skills of employees.

Table 4.4 Descriptive Statistics on Training and Development Programs

	N	Minimum	Mean	Std. Deviation
The training programs given by the bank improved my digital skills	236	1	2.47	1.029
I have access to training opportunities related to digital technologies	236	1	2.47	.991
The content of the training programs is relevant to my job responsibilities	236	1	2.12	.736
The training I receive adequately prepares me for digital transformation initiatives	236	1	2.49	.938
I have had the chance to provide feedback on training programs related to digital skills	236	1	2.61	1.168
Training_and_Development_Program	236	1.00	2.4331	.73021
Valid N (listwise)	236			

Source: Own Survey, 2024

The findings indicate that employees feel training programs have moderately improved their digital skills, reflected in a mean score of 2.47 (Std. Dev. = 1.029). Additionally, employees perceive that access to training opportunities related to digital technologies is adequate, with a similar mean score of 2.47 (Std. Dev. = 0.991). However, respondents feel that the relevance of training content to their job responsibilities is somewhat lacking, as indicated by a mean of 2.12 (Std. Dev. = 0.736). Furthermore, employees believe that the training they receive prepares them moderately well for digital transformation initiatives, evidenced by a mean score of 2.49 (Std. Dev. = 0.938). Lastly, employees feel they have some opportunities to provide feedback on training programs, with a mean of 2.61 (Std. Dev. = 1.168), suggesting room for improvement in this area.

Table 4. 5 Descriptive Statistics on Talent Acquisition Strategies

	N	Minimum	Mean	Std. Deviation
The bank successfully attracts skilled labor with expertise in digital transformation	236	1	2.20	1.018
The recruitment processes give priority to candidates with strong digital skills	236	1	2.57	1.271
The bank has a positive reputation for being an employer of choice for digital talent	236	1	2.34	1.098
There are enough resources allocated to attract and retain digital talent	236	1	2.25	.965
The bank tirelessly promotes its digital transformation initiatives during recruitment	236	1	2.42	1.046
Talent_Acquisition_Strategies	236	1.00	2.3576	.82940
Valid N (listwise)	236			

Source: Own Survey, 2024

The analysis reveals that employees perceive the bank as not very effective in attracting skilled labor with expertise in digital transformation, reflected in a mean score of 2.20 (Std. Dev. = 1.018). There is a moderate perception that recruitment processes prioritize candidates with strong digital skills, as indicated by a mean of 2.57 (Std. Dev. = 1.271). Additionally, employees believe the bank has a somewhat positive reputation as an employer of choice for digital talent, with a mean score of 2.34 (Std. Dev. = 1.098). However, perceptions suggest that the resources allocated to attract and retain digital talent are somewhat insufficient, evidenced by a mean of 2.25 (Std. Dev. = 0.965). Furthermore, employees feel that the bank promotes its digital transformation initiatives during recruitment to a moderate extent, reflected in a mean score of 2.42 (Std. Dev. = 1.046).

Table 4.6 Descriptive Statistics on Employee Engagement and Satisfaction

	N	Minimum	Mean	Std. Deviation
I engage in the bank's digital transformation efforts	236	1	2.17	.742
My opinions regarding digital initiatives are valued by management	236	1	2.35	.888
I am motivated to contribute to the bank's digital transformation initiatives	236	1	2.11	.941
My work contributes to the success of the bank's digital transformation	236	1	1.99	.815
I am satisfied with the level of communication regarding digital transformation efforts within the bank	236	1	2.41	.943
Employee_Engagement_and_Satisfaction	236	85.20	85.9720	.49789
Valid N (listwise)	236			

Source: Own Survey, 2024

The results indicate that employees feel moderately engaged in the bank's digital transformation efforts, with a mean score of 2.17 (Std. Dev. = 0.742). They believe that their opinions regarding digital initiatives are somewhat valued by management, reflected in a mean of 2.35 (Std. Dev. = 0.888). However, there is only a moderate level of motivation among employees to contribute to digital transformation initiatives, as indicated by a mean score of 2.11 (Std. Dev. = 0.941). Many employees feel that their work does not significantly contribute to the success of the bank's digital transformation, evidenced by a mean of 1.99 (Std. Dev. = 0.815). Additionally, employees are moderately satisfied with the communication regarding digital transformation efforts, with a mean score of 2.41 (Std. Dev. = 0.943).

Table 4. 7Descriptive Statistics on Alignment of HR Policies with Digital Transformation Goals

	N	Minimum	Mean	Std. Deviation
policies of the bank support the objectives of digital transformation	236	1	2.25	.938
Recruitment and training practices are aligned with the bank's digital transformation goals	236	1	2.42	.935
Performance evaluations consider employees' contributions to digital initiatives	236	1	2.40	1.008
There is clear communication about how 2 policies relate to digital transformation efforts	236	1	2.72	1.261
The bank's leadership actively promotes the alignment of 2 practices with digital transformation goals	236	1	2.63	1.194
Alignment_of_HR_Policies_with_Digital_Transformation_Goals	236	1.20	2.4856	.87400
Valid N (listwise)	236			

Source: Own Survey, 2024

The findings reveal that employees perceive HR policies as not strongly supporting the objectives of digital transformation, indicated by a mean score of 2.25 (Std. Dev. = 0.938). There is a moderate alignment between recruitment and training practices and digital transformation goals, reflected in a mean of 2.42 (Std. Dev. = 0.935). Employees believe that performance evaluations consider contributions to digital initiatives to a moderate extent, as shown by a mean score of 2.40 (Std. Dev. = 1.008). Additionally, employees feel there is relatively clear communication regarding how HR policies relate to digital transformation efforts, evidenced by a mean of 2.72 (Std. Dev. = 1.261). Lastly, the bank's leadership is perceived as somewhat actively promoting the alignment of HR practices with digital transformation goals, with a mean score of 2.63 (Std. Dev. = 1.194).

Table 4. 8 Descriptive Statistics on Successful Digital Transformation

	N	Minimum	Mean	Std. Deviation
Digital transformation has made our work more efficient	236	1	2.61	1.193
Employees have the training and tools they need to adapt to digital changes	236	1	2.38	1.094
Digital tools help our teams collaborate more effectively	236	1	2.39	.895
The organization encourages employees to share ideas for improving digital initiatives	236	1	2.19	.886
We have a clear strategy for implementing digital transformation in our organization	236	1	2.41	1.135
Successful_Digital_Transformation	236	1.40	2.4036	.73620
Valid N (listwise)	236			

Source: Own Survey, 2024

The analysis indicates that employees feel digital transformation has moderately improved work efficiency, with a mean score of 2.61 (Std. Dev. = 1.193). Respondents believe they have access to adequate training and tools to adapt to digital changes, reflected in a mean of 2.38 (Std. Dev. = 1.094). Digital tools are perceived as somewhat helpful in enhancing team collaboration, as evidenced by a mean score of 2.39 (Std. Dev. = 0.895). However, employees feel that the organization encourages sharing ideas for improving digital initiatives to a limited extent, indicated by a mean of 2.19 (Std. Dev. = 0.886). Additionally, there is a moderate perception of having a clear strategy for implementing digital transformation within the organization, reflected in a mean score of 2.41 (Std. Dev. = 1.135).

4.3. Reliability Test

Reliability refers to how consistent measurements are when the same object is assessed multiple times. An instrument is deemed reliable if it produces similar outcomes under similar conditions (Gravetter and Wallnau, 2017). A common way to evaluate an instrument's reliability is through Cronbach's Alpha coefficient, which measures the internal consistency of a set of items (Leech, Barrette, and Morgan, 2005). The Cronbach's Alpha values range from 0 to 1, with values closer to 1 indicating greater internal consistency. A Cronbach's Alpha of 0.7 or above indicates that the instrument is considered reliable (Cohen, Manion, and Morrison, 2007).

In this study, the Cronbach's Alpha coefficient results for all items in the questionnaire are displayed in a table. Each item has a coefficient of 0.659 or higher, with the overall Cronbach's Alpha for all items being 0.928, indicating that the instrument utilized in this research is reliable. Additionally, correlation analysis measures the relationship between two or more variables. This study employs Spearman's correlation analysis, also known as rank correlation, which is suitable for ordinal data where variables are ranked (Kothari, 2004).

Table 4. 9 Cronbach's Alpha Test

Variables	Number of Items	Cronbach's Alpha
Digital Skills Proficiency	5	0.736
Training and Development Programs	5	0.797
Talent Acquisition Strategies	5	0.820
Employee Engagement and Satisfaction	5	0.659
Alignment of HR Policies with Digital Transformation Goals	5	0.871
Successful Digital Transformation	5	0.742
	30	0.928

Source: SPSS 25 Output

4.3.1 Correlations analysis

Pearson Correlation Coefficient (PCC) is a statistical metric that calculates the linear relationship between two variables in a model and is used to estimate the overall population correlation, with values ranging from -1 to 1. The correlation coefficient is a statistical measure of the degree to which changes in one variable predict changes in another. A higher correlation value suggests a greater connection between the two sets of data (Coetzee, 2003). The value of a positively linked variable rises or falls in lockstep.

Table 4. 1 0 Correlations

Correlations							
		Successful Digital Transformation	Digital Skill Proficiency	Training and Development Program	Talent Acquisition Strategies	Employee Engagement and Satisfaction	Alignment of HR Policies with Digital Transformation Goals
Pearson Correlation	Successful Digital Transformation	1.000	.769	.718	.644	.753	.785
	Digital Skill Proficiency	.769	1.000	.753	.543	.712	.613
	Training and Development Program	.718	.753	1.000	.610	.690	.642
	Talent Acquisition Strategies	.644	.543	.610	1.000	.645	.654
	Employee Engagement and Satisfaction	.753	.712	.690	.645	1.000	.707
	Alignment of HR Policies with Digital Transformation Goals	.785	.613	.642	.654	.707	1.000
Sig. (1-tailed)	Successful Digital Transformation	.	.000	.000	.000	.000	.000
	Digital Skill Proficiency	.000	.	.000	.000	.000	.000
	Training and Development Program	.000	.000	.	.000	.000	.000
	Talent Acquisition Strategies	.000	.000	.000	.	.000	.000
	Employee Engagement and Satisfaction	.000	.000	.000	.000	.	.000
	Alignment of HR Policies with Digital Transformation Goals	.000	.000	.000	.000	.000	.
N	Successful_Digital_Transformation	236	236	236	236	236	236
	Digital_Skill_Proficency	236	236	236	236	236	236
	Training_and_Development_Program	236	236	236	236	236	236

	Talent_Acquisition_Strategies	236	236	236	236	236	236
	Employee_Engagement_and_Satisfaction	236	236	236	236	236	236
	Alignment_of_HR_Policies_with_Digital_Transformation_Goals	236	236	236	236	236	236

Source: SPSS 25 Output

Correlation matrix exposes several important relationships between "successful digital changes" and various independent variables. There is a strong positive correlation of 0.769 with digital skills proficiency, suggesting that improvement of digital skills is closely associated with more success in digital change initiatives. The correlation with training and development program is 0.718, which shows that effective training significantly increases the possibility of successful digital change.

In addition, the correlation with talent acquisition strategies is 0.644, and performs a moderately positive relationship where better talent acquisition practice contributes to high success rates. In addition, employee engagement and satisfaction reflects a strong positive correlation of 0.753, which means that employees' involvement and satisfaction play an important role in promoting success and satisfaction with success with digital change.

Finally, the strongest correlation is seen with adjustment of HR policy with digital transformation of 0.785" of 0.785, which emphasizes the importance of ensuring that HR practice has been adapted to digital purposes. All correlations are statistically important ($p < 0.001$), and strengthen the reliability of these conclusions. With the size of a sample of 236 for each variable, the results highlight the important factors that organizations should focus on achieving successful digital transformation.

4.4 Regression Analysis

4.4.1 Diagnosis Test

Before applying regression analysis some tests were conducted in order to ensure the appropriateness of data to assumptions regression analysis for the model as follows:

4.4.2. Test of Multi-collinearity

Multi-collinearity can be defined as the presence of linear relationship among independent variables. Its influence on a linear regression depends on the degree of relationship among the variables. Perfect Multi-collinearity would result in biased estimates while severe Multicollinearity would reduce the reliability of tests of significance and would make it difficult to distinguish between/ among the influence of independent variables (Wooldridge, 2013). To determine the presence or absence of Multi-collinearity a method called Variance Inflation Factor (VIF) has been used. This method measures the extent to which the values of variances have been increased by Multi-collinearity. The result of the tests of Multi-collinearity are shown in the following table

Table 4. 11 Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-17.956	6.795		-2.642	.009		
	Digital_Skill_Proficency	.346	.055	.335	6.325	.000	.360	2.781
	Training_and_Development_Program	.078	.054	.078	1.453	.148	.352	2.843
	Talent_Acquisition_Strategies	.065	.041	.073	1.590	.113	.482	2.073

	Employee_Engagement_and_Satisfaction	.215	.080	.145	2.675	.008	.341	2.929
	Alignment_of_HR_Policies_with_Digital_Transformation_Goals	.320	.042	.380	7.654	.000	.410	2.441

a. Dependent Variable: Successful_Digital_Transformation

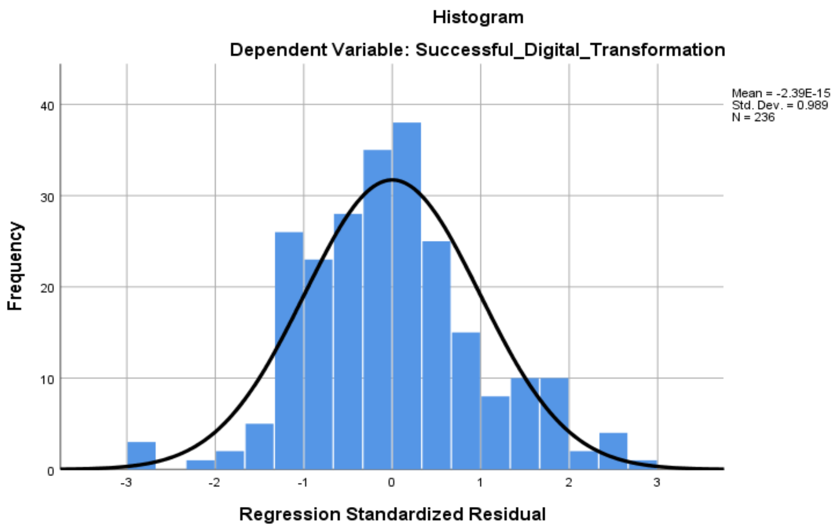
The Variance Inflation Factor (VIF) values in the coefficients table indicate that multicollinearity is not a concern in the regression model, as all values are below the threshold of 10. Specifically, VIF values range from 2.073 to 2.929 for the independent variables, suggesting that they are not highly correlated with each other. This stability enhances the reliability of the coefficient estimates, allowing for accurate interpretation of their individual effects on successful digital transformation.

The analysis reveals that digital skill proficiency has a positive and statistically significant impact on successful digital transformation, with a coefficient of 0.346 ($p < 0.001$). This indicates that for each unit increase in digital skill proficiency, successful digital transformation is expected to increase by 0.346 units, highlighting the strong correlation between higher digital skills and improved transformation outcomes. In contrast, the effect of training and development programs is positive but not statistically significant ($B = 0.078$, $p = 0.148$). This suggests that while there may be a slight positive relationship, it is not robust enough to conclude that enhancements in training significantly influence digital transformation. Similarly, talent acquisition strategies show a positive relationship ($B = 0.065$, $p = 0.113$), but the lack of statistical significance means there is insufficient evidence to confirm a strong impact on transformation efforts. On a more encouraging note, employee engagement and satisfaction demonstrate a significant positive effect ($B = 0.215$, $p = 0.008$), indicating that a one-unit increase in engagement and satisfaction correlates with a 0.215 unit increase in successful digital transformation. This underscores the importance of having engaged and satisfied employees in driving transformation initiatives. Finally, the alignment of HR policies with digital transformation goals is both strong and statistically significant ($B = 0.320$, $p < 0.001$), suggesting that for each unit increase in this alignment, successful digital transformation rises by 0.320 units. This finding emphasizes the critical role of aligning HR practices with digital objectives to facilitate effective transformation.

4.4.3. Normality Test

The normality assumption posits that the observations of the error term are derived from a normal distribution, which forms a symmetrical bell-shaped curve. This curve arises from the tendency of values to cluster around the mean. This assumption is crucial as it underpins statistical inferences drawn from a sample representing a population (Kothari, 2004). To assess normality, residual plots are presented in Table 4.5, indicating that the residuals for each regression closely align with the diagonal line of normality. Additionally, histograms illustrating the shape and spread of the distributions are included, demonstrating that the distributions resemble a bell-shaped curve. Therefore, it can be concluded that the data adhere to a normal distribution. Furthermore, the central limit theorem suggests that as the sample size increases, the sampling distribution of estimates will approach a normal distribution (Gravetter and Wallnau, 2017).

Figure 6 Histogram



4.4.4. Overall regression model and its ANOVA

4.4.4.1 Regression Model Summary

The regression summery are summarized as follows:

Table 4. 12Model Summary

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876[a]	.768	.763	.35836

a. Predictors: (Constant), Alignment_of_HR_Policies_with_Digital_Transformation_Goals, Digital_Skill_Proficency, Talent_Acquisition_Strategies, Training_and_Development_Program, Employee_Engagement_and_Satisfaction

b. Dependent Variable: Successful_Digital_Transformation

The Model Summary shows The R-squared value of 0.768 means that approximately 76.8% of the variance in successful digital transformation is explained by the model's predictors. The Adjusted R-squared value of 0.763 accounts for the number of predictors, still reflecting a robust model fit. The standard error of the estimate is 0.35836, suggesting that the predictions made by the model are relatively close to the actual values. Overall, these metrics indicate that the model effectively captures the key factors influencing digital transformation success

4.4.4.2 Regression ANOVA

The regression ANOVA table are summarized as follows:

Table 4. 13 ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.832	5	19.566	152.358	.000b
	Residual	29.537	230	.128		
	Total	127.369	235			
a. Dependent Variable: Successful_Digital_Transformation						
b. Predictors: (Constant), Alignment_of_HR_Policies_with_Digital_Transformation_Goals, Digital_Skill_Proficency, Talent_Acquisition_Strategies, Training_and_Development_Program, Employee_Engagement_and_Satisfaction						

The ANOVA results indicate that the regression model significantly predicts "Successful Digital Transformation." The F-statistic is 152.358 with a p-value of 0.000, which suggests that at least one of the independent variables—Alignment of HR Policies with Digital Transformation Goals, Digital Skill Proficiency, Talent Acquisition Strategies, Training and Development Program, and Employee Engagement and Satisfaction—has a statistically significant relationship with the dependent variable.

The regression sum of squares is 97.832, indicating that the model explains a substantial portion of the variance in successful digital transformation. The total sum of squares is 127.369, which, when combined, indicates a strong model fit. Overall, these results confirm that the predictors collectively have a significant impact on achieving successful digital transformation.

In conclusion, while "Training and Development Programs" and "Talent Acquisition Strategies" do not show significant individual effects in the regression analysis, their strong correlations with successful digital transformation suggest they are important factors. The ANOVA confirms the overall model's significance, indicating that these variables contribute to the success of digital transformation when viewed collectively.

CHAPTER FIVE

Summary of Findings, Conclusions and Recommendations

5.1 Summary of Findings

The main objective of this paper is to investigate the role of human resources in successful digital transformation of an Islamic Banks, especially ZamZam Bank. The study is based on survey method and data was collected by administering survey questionnaire to employees containing demographic, rating and Likert scale items.

Demographic data gathered encompasses gender, age, educational background, years of service and current position within the organization. Employees rated questions that allowed them to assess various elements of their organization concerning digital transformation. Likert scale offered a 1 to 5 range (from strongly disagree to strongly agree), lets respondents indicate how much they agree with a statement concerning digital competencies or with one of our HR practices.

The reliability of the questionnaire items was assessed using Cronbach's Alpha, with all items exceeding the 0.7 threshold, indicating high reliability. Validity was established through literature review, expert opinions, and correlation tests.

A total of 261 questionnaires were distributed, 235 were returned, response rate was about 90%. Data analysis was done using Statistical Package for Social Sciences (SPSS). Since the responses were ordinal, Spearman's correlation analysis was performed on the independent variables: digital skills proficiency, training and development programs, talent acquisition strategies, employee engagement and alignment of HR policies with digital transformation goals.

The SPSS outputs reveal a strong positive correlation among the key variables, indicating that effective human resource practices are associated with successful digital transformation at ZamZam Bank. Preliminary tests for linearity, normality, and multi-collinearity confirm that the assumptions for regression analysis are met.

Regression analysis was conducted to assess the impact of independent variables on successful digital transformation. The F-statistic results indicate that the combined effect of all independent variables is significant ($p < 0.01$) on the dependent variable. However, while the coefficients for the Training and Development Program ($B = 0.078$, $p = 0.148$) and Talent Acquisition Strategies ($B = 0.065$, $p = 0.113$) are positive, they do not reach statistical significance when considered individually. The R-squared values demonstrate that a substantial portion of the variance in successful digital transformation is explained by the model.

Overall, these findings highlight the essential role of HR practices in enhancing digital skills, supporting strategic talent acquisition, and ensuring alignment of HR policies with the bank's transformation goals. This alignment is crucial for positively contributing to the digital transformation efforts of ZamZam Bank, while also suggesting that further enhancements in training and talent acquisition may be necessary to maximize their impact.

5.2 Conclusion

This research underscores the critical role of human resource practices in achieving digital transformation at ZamZam Bank in Ethiopia. While existing literature often measures digital transformation through technology adoption and operational efficiency, this study uniquely emphasizes HR practices across five key dimensions: digital proficiency, training and development, talent acquisition, employee engagement and satisfaction, and alignment of policies with transformation goals.

The SPSS outputs reveal that employees at ZamZam Bank demonstrate moderate levels of digital skills proficiency and training effectiveness, signaling a need for improvements in these areas. Correlation analysis indicates strong positive relationships among digital skills, training programs, and employee engagement, highlighting how these elements are interconnected and essential for successful digital transformation. Notably, the highest correlation is found with the alignment of HR policies to digital objectives, underlining its importance.

Regression analysis shows that while digital skill proficiency, employee engagement, and policy alignment significantly influence successful digital transformation, the effects of training and talent acquisition strategies are not statistically significant. This indicates that these areas, while important, require further refinement to maximize their impact. The ANOVA results affirm the overall model's significance, confirming that at least one predictor meaningfully contributes to the variance in digital transformation outcomes, emphasizing the need for a cohesive HR strategy.

Furthermore, the absence of multi-collinearity among predictors ensures reliable regression coefficients, allowing for precise interpretation of their contributions. Normality tests confirm that the residuals follow a normal distribution, reinforcing the validity of the regression analysis.

In conclusion, this research highlights the necessity of effective HR practices for facilitating digital transformation at ZamZam Bank. Key findings point to the urgent need for enhanced digital skills training, improved alignment of HR policies with digital goals, and initiatives to boost employee engagement. Addressing these areas is vital for the bank to navigate the challenges of digital transformation effectively and maintain a competitive edge in the Islamic banking sector. Future research could further explore the long-term impacts of these HR strategies on organizational performance and adaptability in an ever-evolving digital landscape. By adopting a forward-thinking approach to HR, ZamZam Bank can position itself as a leader in innovation and excellence within the banking industry.

5.3 Recommendations

Based on the findings and discussions presented in the thesis, the following recommendations are proposed for ZamZam Bank to enhance its human resource practices and facilitate successful digital transformation:

1. **Enhance Digital Skills Training**:
    - Implement comprehensive training programs tailored to the specific needs of employees. Focus on developing digital competencies that align with the bank's strategic goals. Regular assessments should be conducted to identify skill gaps and adjust training content accordingly.
2. **Strengthen Talent Acquisition Strategies**:

- Revise recruitment practices to attract skilled professionals with expertise in digital technologies. ZamZam Bank should build a strong employer brand that highlights its commitment to innovation and employee development, making it an attractive choice for top talent in the competitive banking sector.

3. **Increase Employee Engagement**:
    - Foster a culture that values employee input and involvement in digital initiatives. Regular feedback mechanisms should be established to ensure employees feel heard and appreciated, thereby enhancing their motivation to contribute to the bank's transformation efforts.
4. **Align HR Policies with Digital Objectives**:
    - Ensure that HR policies are explicitly aligned with the bank's digital transformation goals. This includes integrating digital skills development into performance management systems and ensuring that recruitment and training processes reflect the bank's digital aspirations.
5. **Promote Continuous Learning and Development**:
    - Encourage a culture of continuous learning by providing diverse training opportunities across all departments. This can include workshops, online courses, and collaborative projects that equip employees with the skills needed to adapt to rapid technological changes.
6. **Monitor and Evaluate HR Strategies**:
    - Establish metrics to assess the effectiveness of HR practices in supporting digital transformation. Regular evaluations should be conducted to determine the impact of these strategies on organizational performance, employee retention, and overall adaptability.
7. **Future Research Initiatives**:
    - Conduct longitudinal studies to explore the long-term impacts of enhanced HR practices on the bank's performance and employee satisfaction. This research can provide deeper insights into how HR strategies evolve with ongoing digital transformation efforts.

By implementing these recommendations, ZamZam Bank can strengthen its human resource functions, ensuring they effectively support the bank's digital transformation journey while upholding its Islamic banking principles. This proactive approach will position the bank as a leader in innovation and excellence within the financial sector.

5.4. Limitations and Directions for Further Research

- This study was conducted primarily within ZamZam Bank, focusing on branches in Addis Ababa. Future research could expand the scope to include other Islamic banks across Ethiopia, providing a broader understanding of how HRs facilitate digital transformation in diverse contexts.

- The study was limited to specific objectives related to digital skills, talent recruitment and training programs. Other studies could address other factors that influence digital transformation, including organizational culture, technology infrastructure, and a host of other regulatory constraints.

- The scope was limited to employee with branches and may impact generalizability. Future researchers could compare branches using a larger and more representative sample where many of the respondents have varying positions across the Islamic bank to improve generalizability of the results.

- This study primarily utilized quantitative methods through surveys. Future research could incorporate qualitative approaches, such as interviews or focus groups, to gain deeper insights into employee experiences and perceptions regarding digital transformation initiatives. Quantitative methods through questionnaire was mainly used in this study. Future studies could use interviews or focus groups to get a better understanding of how employees view and experience digital transformation and related initiatives

Budget plan

Tentative work plan for conducting research on Islamic banking competitiveness the case of ZamZam bank

No	Activities	Timeline															
		Month 1				Month 2				Month 3				Month 4			
		w1	w2	w3	w4	w 1	w 2	w 3	w 4	w 1	w 2	w 3	w4	w1	w2	w3	w4
1	Topic selection																
2	Proposal Finalization																
3	Ethical review																
4	Data collection																
5	Data entry, cleaning and analysis																
6	Draft thesis																
7	Final thesis																

8	Defense																
9	Dissemination of result																

Reference

Arvidsson, N., Holmström, J., & Lyytinen, K. (2019). Digital Transformation in Banking: Exploring Value Co-Creation in Online Banking Services in India. Journal of Global Information Technology Management.

Bahiroh, E. (2024). Innovative human resource management strategies in the era of digital transformation. PRODUCTIVITY, 1(2), 154-162. https://doi.org/10.62207/6wnrgj39

Berta, A. (2022). Challenges and Opportunities of Interest-Free Banking in the Case of ZamZam Bank S.C.

Boufounou, P., Mavroudi, M., Toudas, K., & Γεωργακόπουλος, Γ. (2022). Digital transformation of the greek banking sector in the covid era. Sustainability, 14(19), 11855. https://doi.org/10.3390/su141911855

Cohen, L., Manion, L. and Morrison, K. (2007) Research Methods in Education. (6th Ed.), Oxon. Routledge.

Company profile. (2024). https://zamzambank.com/company-profile/

Desky, H., & Maulina, I. (2022). Digital Transformation in Islamic Banking. International Journal of Multidisciplinary Research and Analysis, 5(12)

Diener, F., & Špaček, M. (2021). Digital transformation in banking: A managerial perspective on barriers to change. Sustainability, 13(4), 2032. https://doi.org/10.3390/su13042032

Frederick J Gravetter, J. F. and Wallanau, L. B. (2017) Statistics for the Behavioral Science(10th Ed.) Boston, MA. Cengage Learning.

Firdiansyah, F. (2021). Optimization of human resources management in islamic banking. JPS (Jurnal Perbankan Syariah), 2(2), 150-164. https://doi.org/10.46367/jps.v2i2.375

Halim, N. (2023). Accelerating digital talent readiness in malaysian banking sector: a study on technology adoption through the intention to use customer-focused digital solutions. Information

Management and Business Review, 15(1(I)SI), 164-175. https://doi.org/10.22610/imbr.v15i1(i)si.3396

Handayani, D. (2023). Analisis strategi bisnis bank digital syariah di indonesia. Al-Muqayyad Jurnal Ekonomi Syariah, 6(2), 151-165. https://doi.org/10.46963/jam.v6i2.1324

Hilbert, M. (2020). Digital technology and social change: the digital transformation of society from a historical perspective. Dialogues in Clinical Neuroscience, 22(2), 189-194. https://doi.org/10.31887/DCNS.2020.22.2/mhilbert

J., & Albugami, M. (2024). Digital transformation: An empirical analysis of operational efficiency, customer experience, and competitive advantage in Jordanian Islamic banks. Uncertain Supply Chain Management, 12, 705-708.

Khalid, A., Hasnah, H., & Masron, T. (2018). Competency and effectiveness of internal shariah audit in islamic financial institutions. Journal of Islamic Accounting and Business Research, 9(2), 201-221. https://doi.org/10.1108/jiabr-01-2016-0009

Kothari, C.R. (2004) Research Methodology Methods and Techniques. 2nd ed. New Delhi, New Age International Limited Publishers.

Khanchel, H. (2019). The Impact of Digital Transformation on Banking. Journal of Business Administration Research, 8(2), 20-30.

https://doi.org/10.5430/jbar.v8n2p20

Kitsios, F. and Kamariotou, M. (2021). Artificial intelligence and business strategy towards digital transformation: a research agenda. Sustainability, 13(4), 2025. https://doi.org/10.3390/su13042025

Leading digital: Turning technology into business transformation. Harvard Business [1] Review Press.

Leech, N. L., Barret, K. C. and Morgan, G. A. (2005) SPSS for Intermediate Statistics: Use and Interpretation (2nd Ed.) Mahwah, New Jersey. Lawrence Erlbaum Associates, Publishers.

Matt, C., et al. (2021). "Digital Transformation Strategies." Business & Information Systems Engineering.

Mirzagayeva, S., & Aslanov, H. (2022). The digitalization process: what has it led to, and what can we expect in the future? Metafizika Journal.

Mosca, M. (2023). Digitalization of HRM: A study of success factors and consequences in the last decade

Nesindande, A.R.-M., Saurombe, M.D., & Joseph, R.M. (2024). Exploring changes in banking workplaces because of digital technology implementation. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, *22*(0), a2542. **https://doi.org/10.4102/sajhrm.v22i0.2542**

Nicolás-Agustín, Á., Jiménez, D., & Maeso-Fernandez, F. (2021). The role of human resource practices in the implementation of digital transformation. International Journal of Manpower, 43(2), 395-410. https://doi.org/10.1108/ijm-03-2021-0176

Nadkarni, S. and Prügl, R. (2020). Digital transformation: a review, synthesis and opportunities for future research. Management Review Quarterly, 71(2), 233-341. https://doi.org/10.1007/s11301-020-00185-7

Nurjanah, S., Shalshabilla, V., & Dari, A. T. W. (2023). DIGITAL TRANSFORMATION IN THE BANKING INDUSTRY CHALLENGES AND OPPORTUNITIES

https://ijame.id

Osei, K., Owusu, A., Worae, T. A., & Iddrisu, A. A. (2023). Unlocking the full potential of digital transformation in banking: a bibliometric review and emerging trend. Future Business Journal. https://doi.org/10.1186/s43093-023-00207-2

Prokopenko, O., Zholamanova, M., Mazurenko, V., Kozlianchenko, O., & Muravskyi, O. (2022). Improving customer relations in the banking sector of ukraine through the development of priority digital banking products and services: evidence from poland. Banks and Bank Systems, 17(3), 12-26. https://doi.org/10.21511/bbs.17(3).2022.02

Rianti, D. and Syamlan, Y. (2022). Do islamic bankers optimist on islamic banking growth? case study of islamic banking employees in indonesia. Tazkia Islamic Finance and Business Review, 15(2). https://doi.org/10.30993/tifbr.v15i2.280

Rogers, D. L. (2016). The digital transformation playbook: Rethink your business for the digital age. Columbia University Press.

Sayakhmad, O. (2022). An analysis of human capital development in indonesian islamic banking system. Tapis Jurnal Penelitian Ilmiah, 6(2), 91. https://doi.org/10.32332/tapis.v6i2.5340

Schallmo, D., Williams, C. A., & Boardman, L. (2017). Digital Transformation of Business Models — Best Practice, Enablers, and Roadmap. *International Journal of Innovation Management*, *21*(8), 1740014. https://doi.org/10.1142/S136391961740014X

Sharma, R., & Mishra, R. (2014). A Review of Evolution of Theories and Models of Technology Adoption

Shehadeh, M., Alkhwaldi, A. F., almajali, D., Al-Gasaymeh, A., & Abu-AlSondos, I. A. (2023). Digital Transformation and its Impact on Operational Efficiency and Competitive Advantage in Islamic Banks. 2023 International Conference on Business Analytics for Technology and Security (ICBATS)

Shehadeh, M., Atta, A., Barrak, T., Lutfi, A., & Alrawad, M. (2023). Digital transformation: An empirical analysis of operational efficiency, customer experience, and competitive advantage in Jordanian Islamic banks. Uncertain Supply Chain Management, 12(2)

Shehadeh, M., Alsyouf, A., Lutfi, A., Alsubahi, N., Alhazmi, F. N., Al-Mugheed, K., Anshasi, R. Sahu, N. (2018). Investigating The Critical Success Factors Of Digital Transformation For Improving Customer Experience. In CONF-IRM 2018 Proceedings: International Conference on Information Resources Management (CONF-IRM). AIS Electronic Library (AISeL).

Shumba, B. (2023). *An evaluation of the drivers of digital transformation of the banking sector in South Africa*. Selinus University. Retrieved from https://uniselinus.us/sites/default/files/2024-03/Brilliant%20Shumba.pdf

Sutikno, S., Nursaman, N., & Muliyat, M. (2022). The role of digital banking in taking the opportunities and challenges of sharia banks in the digital era. Journal of Management Science (Jmas), 5(1), 27-30. https://doi.org/10.35335/jmas.v5i1.125

Tiara, E., Achmad, D., & Nasarruddin, R. (2023). An analysis of bank syariah indonesia digitalization. Talaa Journal of Islamic Finance, 3(1), 38-50. https://doi.org/10.54045/talaa.v3i1.718

Vial, G. (2018). Understanding Digital Transformation: A Review and Research Agenda. Journal of Strategic Information Systems. https://doi.org/10.1016/j.jsis

Westerman, G., et al. (2022). "Leading Digital: Turning Technology into Business Transformation." Harvard Business Review Press.

(2022). Impact of talent management on employee performance in the banking industry of Bangladesh. EJBM. https://doi.org/10.7176/ejbm/14-14-05

https://doi.org/10.1016/j.jbusres.2022.113611

Appendix

ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS
PROGRAM OF BUSINESS ADMINISTRATION

Dear Respondent,

My name is Ekram Rahmeto. I am a Msc student in business administration at Addis Ababa University. I am currently conducting research On **"The Assessment of the Role of Human Resources in Facilitating Digital Transformation in Islamic Banking the case of ZamZam Bank"** This survey is designed to collect primary data from firms. Your responses are essential for the successful completion of this paper. I appreciate your time and effort in answering all the questions. I can assure you that your responses will be completely anonymous and used only for academic purposes.

If you are interested, I would be happy to share the aggregated findings with you at a later stage.

Please put a tick (√) mark in the appropriate answer. Filling the survey will only take 5 to 7 minutes of your time.

For further inquiry I will be available via:

Email: ekgrahmeto@gmail.com

Phone: +251 966701676

Thank you for your participation!

Instruction

It is not necessary to write your name.

The question will capture the respondents' perceptions and attitudes toward these different factors

Please put tick (√) mark to indicate your level of agreement or disagreement.

Part One: Profile of respondents

1. Gender

Male ☐ ☐ Female

2. Educational level

Degree ☐ Masters ☐ PhD ☐

3. c

0-5 years ☐ 5-10 ☐ 10-20 ☐ >20 ☐

4. Current Position

Branch managers ☐

IT professionals ☐

Customer service representatives ☐

Other, please specify________

Part two:

This questionnaire is distributed to employees within Islamic banks to gather insights on their perceptions regarding digital skills proficiency, training programs, talent acquisition strategies, employee engagement, and the alignment of HR policies with digital transformation goals.

Section 1:Digital Skills Proficiency

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2	I am confident in using digital tools and technologies relevant to my job.					
3	I have gained adequate training to develop my digital skills.					
4	I usually use digital tools to improve my work performance.					
5	My current digital skills meet the demands of my role.					
6	I know the latest digital tools and technologies available in the banking sector.					

Section 2: Training and Development Programs

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	The training programs given by the bank improved my digital skills.					
2	I have access to training opportunities related to digital technologies.					
3	The content of the training programs is relevant to my job responsibilities.					
4	The training I receive adequately prepares me for digital transformation initiatives.					
5	I have had the chance to provide feedback on training programs related to digital skills.					

Section 3: Talent Acquisition Strategies

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	The bank successfully attracts skilled labor with expertise in digital transformation.					
2	The recruitment processes give priority to candidates with strong digital skills.					
3	The bank has a positive reputation for being an employer of choice for digital talent.					
4	There are enough resources allocated to attract and retain digital talent.					
5	The bank tirelessly promotes its digital transformation initiatives during recruitment.					

Section 4: Employee Engagement and Satisfaction

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I engage in the bank's digital transformation efforts.					
2	My opinions regarding digital initiatives are valued by management.					
3	I am motivated to contribute to the bank's digital transformation initiatives.					
4	My work contributes to the success of the bank's digital transformation.					
5	I am satisfied with the level of communication regarding digital transformation efforts within the bank.					

Section 5: Alignment of HR Policies with Digital Transformation Goals

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	HR policies of the bank support the objectives of digital transformation.					
2	Recruitment and training practices are aligned with the bank's digital transformation goals.					
3	Performance evaluations consider employees' contributions to digital initiatives.					
4	There is clear communication about how HR policies relate to digital transformation efforts.					
5	The bank's leadership actively promotes the alignment of HR practices with digital transformation goals.					

Section 6: Successful Digital Transformation

No	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Digital transformation has made our work more efficient.					
2	Employees have the training and tools they need to adapt to digital changes					
3	Digital tools help our teams collaborate more effectively.					
4	The organization encourages employees to share ideas for improving digital initiatives.					
5	We have a clear strategy for implementing digital transformation in our organization.					

Thank you for taking the time to complete this questionnaire. Your responses will help us better understand the topic