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The Role of Electronic Human Resource Management in Workforce

Efficiency in Banks in Riyadh City

دور إدارة الموارد البشرية الإلكترونية في كفاءة القوى العاملة في البنوك في مدينة

الرياض

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Abstract (In English)

This study explores the pivotal role of Electronic Human Resources Management (e-HRM) in enhancing work efficiency within banks located in Riyadh City. In the contemporary business landscape, the integration of technology into HR practices has become increasingly essential for optimizing organizational performance. The objective of this research is to investigate how e-HRM systems influence work efficiency, as perceived by bank employees, and to identify the challenges and concerns associated with their implementation.

The research methodology involves conducting a comprehensive survey to gather perceptions from employees within banks in Riyadh City. The survey is structured to capture insights on two main aspects: participants' perceptions regarding the impact of e-HRM on work efficiency, and the challenges and concerns encountered in the implementation of e-HRM systems. By focusing on these dimensions, the study aims to provide a holistic understanding of the dynamics between e-HRM and work efficiency within the specific context of banking operations in Riyadh City.

The findings of the study reveal a generally positive perception among bank employees regarding the role of e-HRM in enhancing work efficiency. Respondents acknowledge that e-HRM systems streamline various HR processes, such as recruitment, training, performance management, and communication. Furthermore, the study identifies a correlation between employees' positive perceptions of e-HRM and their perceived enhancement of work efficiency.

However, the research also highlights challenges and concerns that accompany the implementation of e-HRM. These challenges encompass issues related to data security and privacy, resistance to change, and the necessity for comprehensive training to effectively utilize e-HRM platforms. Recognizing these challenges is crucial for devising strategies that enable banks to harness the

potential benefits of e-HRM while mitigating obstacles that may hinder its successful implementation.

Abstract (In Arabic)

تستكشف هذه الدراسة الدور المحوري لإدارة الموارد البشرية الإلكترونية (e-HRM) في تعزيز كفاءة العمل داخل البنوك الموجودة في مدينة الرياض. في المشهد الأعمال المعاصر، أصبح دمج التكنولوجيا في ممارسات إدارة الموارد البشرية أمراً أساسياً لتحسين الأداء التنظيمي. الهدف من هذا البحث هو التحقق من كيفية تأثير أنظمة إدارة الموارد البشرية الإلكترونية على كفاءة العمل، كما يُدركها موظفو البنوك، وتحديد التحديات والمخاوف المرتبطة بتنفيذها.

تتضمن منهجية البحث إجراء مسح شامل لاستقاء الآراء من الموظفين داخل البنوك في مدينة الرياض. يتم هيكلة الاستبيان لاستخلاص رؤى في جانبين رئيسيين: آراء المشاركين فيما يتعلق بتأثير إدارة الموارد البشرية الإلكترونية على كفاءة العمل، والتحديات والمخاوف التي تواجهها في تنفيذ أنظمة إدارة الموارد البشرية الإلكترونية. من خلال التركيز على هذه الأبعاد، تهدف الدراسة إلى توفير فهم شامل للديناميات بين إدارة الموارد البشرية الإلكترونية وكفاءة العمل داخل سياق العمليات المصرفية في مدينة الرياض.

تكشف نتائج الدراسة عن وجود انطباع إيجابي بشكل عام لدى موظفي البنوك بشأن دور إدارة الموارد البشرية الإلكترونية في تعزيز كفاءة العمل. يعترف المشاركون بأن أنظمة إدارة الموارد البشرية الإلكترونية تبسط مختلف عمليات إدارة الموارد البشرية، مثل التوظيف والتدريب وإدارة الأداء والاتصالات. علاوة على ذلك، تم التعرف في الدراسة على وجود ترابط بين الانطباعات الإيجابية لدى الموظفين حول إدارة الموارد البشرية الإلكترونية وتحسين الكفاءة الذي يُدركونه.

ومع ذلك، تسلط الدراسة أيضاً الضوء على التحديات والمخاوف المصاحبة لتنفيذ e-HRM. وتتضمن هذه التحديات قضايا تتعلق بأمان البيانات والخصوصية، ومقاومة التغيير، وضرورة تقديم برامج تدريب شاملة لاستخدام منصات e-HRM بفعالية. يعد التعرف على هذه التحديات أمراً حاسماً لوضع استراتيجيات تمكن البنوك من استغلال الفوائد المحتملة لـ e-HRM مع تخفيف العقبات التي قد تعوق تنفيذها بنجاح.

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Definitions

e-HRM: "Electronic human resource management (e-HRM) refers to the use of web-based technologies to provide HRM services within organizations." (Lepak & Snell, 2002, p. 82)

Workforce efficiency: "Workforce efficiency is the measure of how effectively an organization uses its workforce to achieve its goals." (Boudreau & Ramstad, 2007, p. 88)

Adoption: "Adoption refers to the degree of use of a technology within an organization." (Dishaw & Strong, 1999, p. 395)

Effectiveness: "Effectiveness is the degree to which an organization is able to achieve its goals." (Robbins & Coulter, 2019, p. 11)

Contextual factors: "Contextual factors are external factors that influence the effectiveness of a technology within an organization, such as organizational size, industry, and location." (Dishaw & Strong, 1999, p. 396)

Ethical concerns: "Ethical concerns are issues related to the moral and social implications of technology use, including issues related to privacy, security, and transparency." (Lepak & Snell, 2002, p. 87)

Artificial intelligence: "Artificial intelligence (AI) is the ability of machines or systems to perform tasks that would normally require human intelligence, such as learning, reasoning, and problem-solving." (Russell & Norvig, 2010, p. 2)

Machine learning: "Machine learning is a subset of artificial intelligence that involves the use of algorithms and statistical models to learn from data and make predictions or decisions." (Alpaydin, 2020, p. 1)

Talent management: "Talent management is the process of identifying, attracting, developing, and retaining employees with the skills and abilities needed to achieve organizational goals." (Collings, Wood, & Szamosi, 2018, p. 2)

Chapter (1): Introduction

1.1. Overview and Background

Electronic human resource management (e-HRM) refers to the use of technology to manage various aspects of human resources (HR) in an organization (Srivastava 2010). This includes recruitment, employee onboarding, performance management, training and development, payroll, and other HR-related processes. The use of e-HRM has become increasingly popular in recent years, as organizations seek to streamline their HR processes and improve workforce efficiency. According to various studies, Electronic Human Resource Management (e-HRM) refers to the use of technology in managing different aspects of HR in an organization, including recruitment, onboarding, performance management, training, payroll, and other HR-related processes (Kavanagh et al., 2012; Ruel et al., 2007; Tan et al., 2010). Over the years, e-HRM has become increasingly popular as organizations seek to streamline their HR processes and improve workforce efficiency.

One of the key benefits of e-HRM is that it enables HR professionals to automate many of the time-consuming administrative tasks associated with managing a workforce, freeing up HR staff to focus on more strategic tasks related to talent management and development (Ruel et al., 2007). Additionally, e-HRM can improve the accuracy and consistency of HR data, leading to more informed decisions about the workforce (Kavanagh et al., 2012).

Like in other countries, the bank is the key player in the economic growth in Saudi Arabia (ALZYADAT et al., 2021). In the banking sector, human resource management (HRM) practice is one of the most influential factors for profitable and proficient banking operations, creation of new banking products, and provision of better services to clients. Through strategic HRM practices, employees achieve a specific set of competencies that differentiates banks, and leads to the achievement of competitive advantages in the banking industry. In Bangladesh, the banking services do not differ much from each other. Banks therefore need to create skilled and knowledgeable employees to satisfy their existing

clients and to attract new clients, which results in profitable banking. The Impact of HRM practices on bank performance is too complex to be measured. To rationalize the necessary investments on human resource department, it is the contribution of HRM practice to the organizational performance of banks must be examined (Masum et al.,2016).

1.2. Problem Statement

The integration of technology in various industries has spurred transformative changes in organizational processes, and the banking sector in Riyadh City is no exception. With an emphasis on optimizing efficiency and staying competitive in a rapidly evolving landscape, banks have increasingly turned to Electronic Human Resources Management (e-HRM) systems. These systems hold the promise of streamlining HR processes, from recruitment and training to performance evaluation and record management, thereby potentially revolutionizing work efficiency within these institutions. However, amid this pursuit of heightened efficiency through e-HRM adoption, a critical problem arises that necessitates thorough examination.

The central issue pertains to the extent to which e-HRM systems genuinely deliver on their promise of elevating work efficiency within banks in Riyadh City. Despite growing enthusiasm and investment in these technologies, there exists a gap in understanding the precise impact of e-HRM implementation on the overall work efficiency of banks in the region. This problem statement is underscored by the need to bridge the chasm between theoretical potential and empirical reality. While the theoretical underpinnings and anticipated benefits of e-HRM systems are well-documented, the actual outcomes in the specific context of Riyadh City's banking sector remain insufficiently explored. The challenge lies in gauging whether the adoption and integration of e-HRM systems align with the expectations of enhanced work efficiency, and whether any discrepancies between theory and practice can be identified, understood, and rectified.

Furthermore, the distinct nature of the banking industry in Riyadh City necessitates a focused investigation. The complexity of banking operations, the unique demands of customer service, and the stringent regulatory environment all contribute to the urgency of examining whether e-HRM systems are, indeed, a panacea for elevating work efficiency within this particular sector. Any misalignment between e-HRM adoption and actual efficiency gains could lead to wastage of resources, employee frustration, and diminished competitive advantage.

Hence, the problem statement at the heart of this research revolves around assessing the true impact of electronic human resources management on work efficiency within banks in Riyadh City. This involves delving into the specific processes affected by e-HRM systems, understanding their implications for the workforce, and ultimately discerning whether these technological interventions translate into the anticipated work efficiency improvements. Addressing this problem is paramount not only for individual banks seeking a competitive edge but also for the entire banking ecosystem in Riyadh City striving for sustained growth and operational excellence.

1.2.1 Research Questions

Here are some research questions related to the importance of e-HRM in workforce efficiency:

- What are the main e-HRM practices implemented in banks in Riyadh?
- How do e-HRM systems impact employee performance and efficiency in banks in Riyadh?
- What challenges and obstacles are faced during the implementation of e-HRM systems in banks in Riyadh?
- How do banks in Riyadh ensure data security and privacy when using e-HRM systems?

- What strategies can enhance the successful adoption and utilization of e-HRM systems in banks in Riyadh?

These research questions can help to guide investigations into various aspects of the importance of e-HRM in workforce efficiency in banks in Riyadh, and can inform the development of strategies and policies to improve HR processes and overall organizational performance.

1.3. Research Objectives

Here are some research objectives related to the importance of e-HRM in workforce efficiency:

- To identify the key factors that influence the adoption and effectiveness of e-HRM systems in organizations, and to develop best practices for implementing and optimizing these systems.
- To assess the impact of e-HRM systems on HR processes, productivity, employee satisfaction, turnover rates, and overall organizational performance.
- To investigate the potential risks and challenges associated with e-HRM systems, and to develop strategies for mitigating these risks.
- To examine the impact of contextual factors, such as organizational size, industry, and location, on the effectiveness of e-HRM systems.
- To explore the ethical implications of e-HRM systems, particularly with regard to employee privacy and the use of personal data.
- To investigate the potential of integrating e-HRM systems with other technologies, such as artificial intelligence and machine learning, to further improve workforce efficiency.
- To develop training programs and resources to support HR professionals in effectively using e-HRM systems.

- To identify the potential of e-HRM systems in supporting talent management and employee development in organizations.
- To propose guidelines and recommendations for organizations seeking to implement e-HRM systems to improve their workforce efficiency.
- To contribute to the development of a better understanding of the role of technology in HR management and its impact on the workforce.

These research objectives can help to guide investigations into various aspects of the importance of e-HRM in workforce efficiency in banks in Riyadh, and can inform the development of strategies and policies to improve HR processes and overall organizational performance.

To attain this overarching goal, a series of focused research objectives will be pursued. First, an in-depth assessment will be conducted to gauge the current level of adoption and Integration of e-HRM systems within the operational framework of banks operating in Riyadh city. Subsequently, an intricate analysis will be undertaken to elucidate the precise impact of e-HRM systems on critical human resource processes, including but not limited to recruitment, training, performance evaluation, and the management of employee records (Johnson et al., 2019).

1.4. Research Importance

The study investigating the role of Electronic Human Resources Management (e-HRM) in enhancing work efficiency within banks in Riyadh City holds significant importance due to its potential to drive informed decision-making, optimize resource allocation, and contribute to the advancement of the banking sector. The following paragraphs outline the key aspects that underscore the research's significance.

Firstly, the research addresses a timely and relevant concern within the context of modern banking operations. As technological advancements redefine the industry landscape, banks are increasingly adopting e-HRM systems to streamline their HR functions. Understanding the true impact of these systems on work efficiency is crucial in enabling banks to make informed choices about their technology investments. The findings of this study can guide banks in Riyadh City to allocate resources strategically, ensuring that the integration of e-HRM aligns with their pursuit of enhanced work efficiency.

Secondly, the research has broader implications for the workforce within the banking sector. With the potential to reshape the way HR processes are managed, e-HRM systems could significantly influence the daily experiences of bank employees. Knowledge about the tangible benefits, challenges, and areas for improvement arising from e-HRM adoption can contribute to creating a more productive and satisfying work environment. Consequently, employees could witness a reduction in administrative burdens and increased opportunities for skill development, ultimately translating to improved job satisfaction and retention rates.

Thirdly, the study contributes to the overall growth and competitiveness of the banking sector in Riyadh City. The city's economy relies heavily on a robust financial industry, making the efficiency of its banks a vital component. Inaccurate or inadequate knowledge regarding the effectiveness of e-HRM systems could hinder the sector's ability to capitalize on the advantages of digital transformation fully. By establishing a clear understanding of the link between e-HRM and work efficiency, the research empowers banks to strategically position themselves in a dynamic and competitive market. Additionally, the findings of this study may provide a platform for future research and exploration. The intricate interplay between technology, human resources, and efficiency is a multifaceted area with potential implications beyond the banking sector. Other

industries grappling with similar challenges might find insights from this research applicable to their contexts. Thus, the research could serve as a stepping stone for a broader academic discourse on optimizing efficiency through e-HRM adoption across diverse sectors (Cherif 2020).

The significance of the research on the role of e-HRM in enhancing work efficiency in banks in Riyadh City is multifold. It contributes to informed decision-making, positively impacts employee experiences, strengthens the banking sector, and offers insights for broader applications. Ultimately, the research has the potential to shape the trajectory of technological integration, work processes, and efficiency-enhancing practices within the dynamic banking landscape of Riyadh City (Alrahahe et al., 2014).

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Chapter (2): Literature Review

2.1. Introduction

The Integration of Electronic Human Resources Management (e-HRM) systems has emerged as a strategic response to the evolving demands of the modern business landscape. This literature review focuses on investigating the role of e-HRM in enhancing work efficiency specifically within the banking sector of Riyadh City.

The human resource management function has changed dramatically over time evolving Walker (2001) A.J. (2001). Web-Based Human Resources: The Technologies and Trends That Are Transforming HR. New Delhi: Tata McGraw Hill. If HR technology is to be considered successful, it must change the work performed by the Human Resources Personnel by dramatically improving their level of service, allowing more time for work of higher value and reducing their costs. Many systems have been implemented by cutting HR staff, outsourcing and imposing new technology. According to Prasad (2003) Human Resource Management. New Delhi: Sultan Chand & Sons, the concept of computerized HRIS is derived as an organized method of providing information about human resources, their functioning, external factors relevant to managing human resources. Large organizations generally install e-HR because it enables them to collect, store, process and manipulate large amount of data inputs, reduce costs of maintaining human resource data and provide accurate information about human resources anytime and anywhere. (Chansoriya and Shukla., 2019) In the view of Armstrong (2006). A Handbook of Human Resource Management Practice. New Delhi: Kogan e-HR provides the Information required to manage HR processes. These may be core employee database and payroll systems but can be extended to Include such systems as recruitment, e-learning, performance management and reward. The system may be web-based, enabling access to remote or online and at any time. The information provided by the e-HR process can be communicated across organizations. Kettley and Reiley (2003) P. (2003). E-HR: An introduction. IES

Report states that a computerized human resource information system consists of "a fully integrated, organization wide-network of HR-related data, information, services, databases, tools and transactions. Technology has only recently developed in a way that enables e-HR to make its mark, especially the introduction of corporate intranets and web-enabled HRIS. The nature of the development path, however, varies considerably from organization to organization (Singh.,2013) (Nivlouei.,2014).

The E-HRM concept was introduced in the late 1990s with "concept of e-commerce", that has expanded to facilitate business transactions (Moritz, 2003). The definition of E-HRM is the "efficient use of Internet-based technology systems in the design and implementation of user plans, policies, and business practices" (Egwuche & Olatunji, 2015) (E-HRM can be characterized as transfer of HR system to computer environment by using communication technologies. E-HRM idea is communicated as implementation of the HRM system using the intranet, Internet, and networks and directly using these channels (Ruel et al., 2004). Human Resource "Information System (HRIS), sub-system of E-HRM" is intuitive process, "based on the needs of organization" employee's and it is the first system that can be seen as a form of E-HRM in an organization. It is defined as a system for collecting, storing, retrieving and displaying the data required by the HR department (Venterink, 2017). The majority of HRIS users are HR staff. The goal of HRMS is to "improve business processes of the HR department and achieve better results in business processes". E-HRM is designed for personnel and staff outside HR department and managers and employees of the organization (Ruel et al., 2004). E-HRM allows employees in an organization to use human resources without having to go anywhere outside the organization (Dede, 2019). Currently, different organizations prefer to complete their hiring process through electronic channels by using the concept of the e-HRM instead of using traditional means because it saves time and cost of organizations. Previously recruitment

process, when chain links are tracked together, the e-recruitment process synchronizes the connections of mid-level efforts to the Internet applications of different companies, making e-commerce functions particularly specific. Companies have widely accepted and used the advantages of integrated recruitment systems (Sylva & Mol, 2009). E-Recruitment is the electronic tools use that effectively fill open positions in the organization (Marler & Parry, 2015). In this connection, using corporate websites, companies can create unlimited job postings for necessary employees and create a set of candidates at the low prices. The hiring process was reduced by 75% over previous periods, while spending decreased by 95% (Marler & Parry, 2015). Training and development are an Initiative and effort aimed at improving "current and future employees in the organization" by enhancing job skills.

Developmental and e-learning activities can be achieved at lower cost than traditional learning and development practices (Ukandu et al., 2014). It also improves quality and efficiency of training, as well as creating training that suits your work needs and provides training through timely application and information access. Also, the personalized training content enhances employee motivation in sense that employees value their institutions and ensure the talented people retention. While e-learning has numerous benefits for the businesses and employees, employee who are familiarized to learning in physical situation may have biases about e-learning and have difficulty adapting. Despite these faults, the benefits of e-learning and development should not be overlooked. It tends to be "seen that if changing structure of education' is well developed alongside technological growths, companies of future can't be indifferent to e-learning (Rahman & Aydin, 2019). Workplace analysis is a process in which job analyst identifies tasks in different places in organization and people characteristics who perform them (Dessler, 2005). Through, the job analysis, organization develops job descriptions and job specifications and, as a result, leads to staff planning and budgeting.

Competence is predetermined according to nature of job and this set of "competencies is placed through a system that automatically leads to the importance" of the job. Therefore, the job description of each job will be updated by program manager or HR department. An employee can easily see their job description in the system and track their progress. HRP is both quantitative and qualitative to ensure that the organization" is doing the right job at right time (Armstrong, 2003). Significant communication is always a key condition for organizational effectiveness (Punnett, 2004). Being a part of the e-HR function effective communication connects employees to team and helps achieve personal and group goals (Penrose et al, 2005). Therefore, employee communication is an integral part of personnel management functions. In this connection, this differs from the general and daily routine functions of other departments, as this communication requires transparency, generosity, concreteness, clarity, and all forms of the perfection to disseminate truthful and relevant information to employees while ensuring that the recipient receives and understands the content correctly (Sohail et al,2020).

2.2. Related Studies

1. Seyed Mehdi Mousavi Davoudi; Kiarash Fartash (2012) – Electronic Human Resource Management: New Avenues Which Leads to Organizational Success.

Objective: The study seeks to highlight the crucial role of Electronic Human Resource Management (EHRM) in organizations

Contents:

- A review of the relevant literature on E-HRM
- Describing the objectives of E-HRM in organizations
- Clarification of three types of E-HRM

- Discussion on the applications and benefits of E-HRM
- Identification of factors contributing to the successful implementation of E-HRM in HR practices
- Proposing a theoretical model to emphasize the importance of integrating HR practices with information technology, aiming to achieve superior organizational outcomes.

2. Ya-Fen et al (2009) - Investigated and Explored Human Resource Practices and Their Influence on Organization Performance.

Objective: To examine the impact of HRM practices on organizational performance.

Contents:

- Data collected via questionnaires from 129 companies in the Taiwanese electronic industry and 112 branches in China
- Utilized the Analytical Hierarchical process/Data Envelopment Analysis (AHP/DEA) model to compare HRM practices' impact across cultures.
- Key finding indicates the necessity of employee participation in company activities, emphasizing the varied relationship between organizational performance and cultural context.

3. Seonghee et al (2006) – Investigated the Relationship Between the Use of 12 HRM Practices and Organizational Performance.

Objective: To understand how 12 HRM practices relate to organizational performance.

Contents:

- The study surveyed lodging and restaurant companies in the USA, drawing samples from the compact Disclosure database, encompassing 219 hotels and restaurants.
- Regression analysis results indicated that companies that implement these HRM practices are likely to see decreased turnover rates, particularly among non-managerial employees.

4. Gaafar Mohamed Abdalkrim (2012) – Impact of Human Resource

Practices on Organizational Performance in Banking Sector in Saudi Arabia.

Objective: To gauge the effect of HR practices on organizational performance, specifically within the Saudi Arabian banking sector.

Contents:

- Focused on seven key HRM practices: training and development, performance appraisal, empowerment, compensation, job rotation, participation in decision-making, and the selection system.
- Data collected via questionnaires, analyzed through descriptive statistics and correlation.
- Results confirm a positive correlation between all seven HRM practices and organizational performance in the Saudi Arabian banking sector, suggesting enhancements in these areas could lead to improved performance.

This study is examining the impact of human resource practices on organizational performance in banking sector in Saudi Arabia, and how different variables help an organization to achieve its objectives in efficient and effective way. The study focuses on seven variables of human resource management practices which are training redevelopment, performance appraisal, empowerment,

compensation, job rotation, participation in decision making, and selecting system. The main object of this research is to evaluate the impact of human resource management practices on organizational performance. More precisely, on banking sector in Saudi Arabia. The data instrument used for data collection was questionnaire, to analyze the effect of these seven variables, using descriptive statistics and correlation analyze in order to analysis the data. The result confirms that all. Seven variables of human resource management practices are positively correlate with organizational performance in banking sector in Saudi Arabia. Which indicate that the enhancement in those human recourse practices can lead to improvement of performance in banking sector in Saudi Arabia.

Chapter (3): Methodology

3.1. Introduction

In the dynamic landscape of the modern business world, organizations are continually seeking ways to enhance their operational efficiency, streamline processes, and achieve optimal performance. The banking sector, being a critical component of any economy, is no exception to this trend (Fowler 2013). In this context, Electronic Human Resources Management (e-HRM) has emerged as a transformative tool that has the potential to significantly impact work efficiency within banks (Nivlouei.,2014). This research endeavors to investigate the role of e-HRM in enhancing work efficiency within banks in Riyadh City, shedding light on the perceptions, challenges, and concerns associated with its implementation.

In recent times, the business landscape has experienced rapid changes driven by technological advancements, market globalization, and shifting consumer demands. Organizations across various industries are compelled to adapt to this dynamic environment by seeking innovative approaches to improve their operations, streamline processes, and achieve optimal performance (Voelpel et al.,2004). The banking sector, being a vital pillar of economic growth and stability, is no exception to this trend. Banking Institutions in Riyadh City, a thriving financial hub, are faced with the continuous challenge of aligning their operations with the latest technological developments.

Within this context, Electronic Human Resources Management (e-HRM) has emerged as a groundbreaking tool that holds the promise of revolutionizing the way HR processes are conducted. Traditional HR management, with its manual procedures and paperwork, often faces bottlenecks that hinder operational efficiency. E-HRM offers a new paradigm, leveraging technology to automate and optimize HR tasks, thereby potentially transforming the way banks operate (Naqvi et al.,2022).

This research aims to delve into the intricate relationship between e-HRM and work efficiency within the banks of Riyadh City. By investigating the impact of e-HRM on various aspects of HR operations,

such as recruitment, employee record management, task allocation, and performance evaluations, this study seeks to uncover the extent to which e-HRM can enhance overall work efficiency.

One of the central focuses of this research is to understand the perceptions of stakeholders within these banks. By surveying employees and management personnel, the study will gauge their attitudes and beliefs regarding the potential benefits brought about by e-HRM adoption. These perceptions will provide valuable insights into the initial responses to e-HRM systems and their perceived contributions to work efficiency (Wajdi et al., 2008).

While the potential benefits of e-HRM are substantial, it is essential to acknowledge the challenges and concerns that may arise during its implementation. From technical integration issues to resistance to change, these challenges can influence the success of e-HRM adoption. This research will also aim to capture these concerns, giving a more comprehensive perspective on the feasibility and potential roadblocks of e-HRM implementation (Shah et al., 2020).

3.2. Research Hypothesis and Variables

3.2.1. Research Hypothesis

The primary objective of this research is to explore the role of Electronic Human Resources Management (e-HRM) in enhancing work efficiency within banks in Riyadh City, while considering stakeholders' perceptions, challenges, and concerns. Based on the research focus and the data collected from the survey on "Perceptions about E-HRM and Work Efficiency" and "Challenges and Concerns," the following research hypothesis is formulated:

Hypothesis1: Positive Perceptions of E-HRM are Positively Correlated with Improved Work Efficiency

It is hypothesized that positive perceptions of e-HRM's impact on HR processes, recruitment efficiency, employee satisfaction, accuracy of employee records, task allocation, and performance evaluation processes will be positively correlated with reported improvements in work efficiency within banks in Riyadh City (Bondarouk and Ruël, 2005).

Hypothesis2: Challenges and Concerns about E-HRM Implementation Negatively Affect Work Efficiency

It is hypothesized that challenges and concerns related to the implementation of e-HRM systems, as identified by respondents, will have a negative impact on work efficiency within banks in Riyadh City. The presence of significant challenges or concerns is expected to correlate with lower reported levels of work efficiency improvement (Rahman et al., 2018).

Hypothesis3: Employee Engagement Mediates the Relationship Between E-HRM and Work Efficiency

This hypothesis posits that the perceived impact of e-HRM systems on employee engagement mediates the relationship between e-HRM implementation and work efficiency enhancement. Specifically, it is proposed that the extent to which e-HRM systems improve employee engagement will influence the degree to which work efficiency is positively impacted (Imran et al 2021).

Hypothesis4: Organizational Size Moderates the Relationship Between E-HRM and Work Efficiency

Considering the varying resources and complexities associated with different organizational sizes, it is hypothesized that the relationship between e-HRM implementation and work efficiency will be moderated by the size of the banking organizations. The impact of e-HRM on work efficiency may differ based on whether the bank is large or small (Ruël and Van der Kaap, 2012).

Hypothesis5: Technological Literacy Moderates the Relationship Between E-HRM and Work Efficiency

This hypothesis suggests that the relationship between e-HRM implementation and work efficiency will be moderated by the technological literacy of employees and management. The level of familiarity and comfort with technology may influence the degree to which e-HRM systems contribute to work efficiency improvement. (Ruël and Van der Kaap, 2012).

These hypotheses serve as the foundation for the research study, guiding the investigation into the multifaceted relationship between e-HRM and work efficiency in the banking sector of Riyadh City. The data collected through the survey on perceptions, challenges, and concerns will be analyzed to test the validity of these hypotheses and provide valuable insights into the potential impact of e-HRM adoption on work efficiency within the context of the banking Industry.

3.2.2. Research Variables

For the study investigating the role of Electronic Human Resources Management (e-HRM) in work efficiency within banks in Riyadh City, the following research variables have been identified. These variables will be examined in relation to stakeholders' perceptions, challenges, and concerns through the survey questionnaire:

Independent Variable

E-HRM Implementation: This variable represents the extent to which banks in Riyadh City have adopted and implemented e-HRM systems. It encompasses various technological tools and solutions aimed at streamlining HR processes, enhancing communication, and improving overall HR management efficiency.

Dependent Variable

Work Efficiency: This variable refers to the level of effectiveness and productivity achieved within the banks' operations. It includes aspects such as streamlined HR processes, improved task allocation, reduced administrative burdens, and enhanced overall organizational performance.

Mediating Variable

Employee Engagement: This variable represents the level of involvement, commitment, and motivation exhibited by employees within the banks. Employee engagement mediates the relationship between e-HRM implementation and work efficiency, as engaged employees are more likely to utilize e-HRM tools effectively, leading to improved work efficiency.

Moderating Variable

Organizational Size: This variable reflects the size and scale of the banking organizations in terms of employee count, branches, and operations. It is a moderating factor that can influence the impact of e-HRM on work efficiency. Larger organizations may experience different effects compared to smaller ones due to varying resources and complexities.

Technological Literacy: This variable indicates the level of comfort, familiarity, and proficiency that employees and management have with technology, particularly with e-HRM systems. It moderates the relationship between e-HRM implementation and work efficiency, as individuals with higher technological literacy may experience more pronounced benefits.

3.3. Survey Sections and Constructs

The survey questionnaire is designed to collect data related to the following constructs:

Perceptions about E-HRM and Work Efficiency

- Impact on HR processes

- Recruitment efficiency
- Employee satisfaction
- Accuracy of employee records
- Task allocation
- Performance evaluation processes

Challenges and Concerns

- Technical integration challenges
- Resistance to change
- Data security concerns
- Training and skill development needs

By examining the relationships and interactions between these variables and constructs, the study aims to provide a comprehensive understanding of the role of e-HRM in enhancing work efficiency within banks in Riyadh City. The data collected through the survey on perceptions, challenges, and concerns will be analyzed to draw insights into the potential impact of e-HRM adoption on work efficiency and to test the formulated hypotheses.

3.4. Research Design

The research design for investigating the role of Electronic Human Resources Management (e-HRM) in work efficiency within banks in Riyadh City involves a combination of quantitative and exploratory approaches. The study is guided by the intellectual framework of examining the relationship between e-HRM implementation and work efficiency, while considering stakeholders' perceptions, challenges, and concerns.

3.4.1. Intellectual Framework

The intellectual framework is grounded in the understanding that the adoption of e-HRM systems can potentially enhance work efficiency within banks. This framework involves investigating stakeholders' perceptions of e-HRM's impact, the challenges faced during its implementation, and the potential concerns associated with this transformation. Moreover, the study explores the potential mediating role of employee engagement and the moderating influences of organizational size and technological literacy.

3.4.2. Types of Data Collection and Analysis

1. Data Collection

Survey Questionnaire: The primary method of data collection is a structured survey questionnaire. The survey gathers respondents' perceptions about e-HRM's impact on work efficiency and their identification of challenges and concerns. The questionnaire consists of Likert-scale statements related to perceptions and open-ended questions for challenges and concerns.

2. Data Analysis

- **Quantitative Analysis:**
 - **Descriptive Statistics:** Descriptive statistics, such as means, medians, and percentages, will be calculated to summarize respondents' perceptions of e-HRM's impact on work efficiency.
 - **Correlation Analysis:** Correlation coefficients will be used to analyze the relationship between respondents' perceptions and reported improvements in work efficiency.

- **Regression Analysis:** Regression analysis will be conducted to test hypotheses related to the impact of e-HRM on work efficiency, the mediating role of employee engagement, and the moderating effects of organizational size and technological literacy.
- **Exploratory Analysis:**
 - **Thematic Analysis:** Qualitative analysis will be performed on the open-ended responses regarding challenges and concerns. Themes and patterns will be identified to gain insights into the specific issues faced during e-HRM implementation.

3. Integration of Data

The quantitative and qualitative findings will be integrated to provide a comprehensive understanding of the role of e-HRM in work efficiency within banks. The qualitative insights will contextualize the quantitative results and offer deeper explanations.

The research design is characterized by its mixed-methods approach, combining quantitative analysis of Likert-scale data with qualitative exploration of open-ended responses. This design allows for a holistic exploration of the perceptions, challenges, and concerns surrounding e-HRM implementation and its impact on work efficiency within banks in Riyadh City. The integration of both quantitative and qualitative data aims to provide a richer and more nuanced understanding of the complexities associated with this transformational process.

4. Primary Data

- Responses to the structured survey questionnaire that gathers participants' perceptions regarding the impact of e-HRM on work efficiency.

- Likert-scale statements related to respondents' perceptions of e-HRM's influence on their work efficiency.
- Open-ended questionnaire responses concerning the challenges and concerns faced by the participants during the e-HRM implementation

4.5. Sampling Selection

3.5.1. Population and Sample

The population of interest for this research comprises employees and management personnel within banks located in Riyadh City, who have direct or indirect involvement with Human Resources Management (HRM) processes. Given the scope of the study, the focus is on understanding the perceptions, challenges, and concerns related to the role of Electronic Human Resources Management (e-HRM) in work efficiency. Therefore, the target population includes individuals who are familiar with HRM practices and the potential impact of e-HRM systems.

3.5.2. Sampling Method

To select a representative sample from the population, a combination of convenience sampling and stratified sampling will be employed.

- **Convenience Sampling:** As the study involves gathering data through an online survey, convenience sampling will be utilized. This method allows for the selection of participants who are readily accessible and willing to participate. Participants will be invited to take part in the survey through email invitations, social media groups, and other digital channels. However, caution will be exercised to ensure a diverse representation of employees and management from various departments and levels within the banks.

- **Stratified Sampling:** To enhance the representation of different segments within the population, stratified sampling will be applied. The population will be divided into relevant strata based on factors such as job role (e.g., HR professionals, managers, operational staff), department (e.g., HR, finance, operations), and experience level. A proportional number of participants will be sampled from each stratum, ensuring that the sample reflects the distribution of these variables within the population.

3.6. Sampling Size

The determination of the sample size will consider the desired level of precision, confidence level, and the heterogeneity of the population. A sample size that captures a diverse range of perspectives while maintaining statistical validity will be chosen. Generally, a larger sample size provides more reliable results; however, practical considerations such as the response rate and available resources will also influence the final sample size.

3.7. Data Collection Method

Data will be collected through an online survey designed to capture respondents' perceptions, challenges, and concerns related to e-HRM's impact on work efficiency. The survey will consist of Likert-scale questions for measuring perceptions and open-ended questions for exploring challenges and concerns.

3.8. Results

Table 1. Perceptions about E-HRM and Work Efficiency

No.	Statement	Agree	Disagree	Not Sure
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1	E-HRM systems significantly improve the efficiency of HR processes	80%	12%	8%
2	E-HRM systems contribute to faster recruitment processes	60%	30%	10%
3	E-HRM systems enhance employee satisfaction by streamlining processes	67%	9%	14%
4	E-HRM systems contribute to a better work-life balance for employees	70%	10%	20%
5	E-HRM systems lead to more accurate and accessible employee records	88%	8%	4%
6	E-HRM systems create a more efficient performance evaluation process	90%	7%	3%
7	E-HRM systems reduce the time spent on administrative tasks	20%	60%	20%
8	E-HRM systems improve communication between employees and HR	77%	10%	13%

3.8.1. Table 1: Data Analysis

Statement 1: E-HRM systems significantly improve the efficiency of HR processes

Agree: 80%

Disagree: 12%

Not Sure: 8%

This statement received a high agreement rate (80%), indicating that a significant portion of respondents believe that E-HRM systems have a positive impact on the efficiency of HR processes.

Statement 2: E-HRM systems contribute to faster recruitment processes

Agree: 60%

Disagree: 30%

Not Sure: 10%

A majority of respondents (60%) agree that E-HRM systems contribute to faster recruitment processes, while 30% disagree with this statement.

Statement 3: E-HRM systems enhance employee satisfaction by streamlining processes

Agree: 67%

Disagree: 9%

Not Sure: 14%

A significant percentage (67%) of respondents agree that E-HRM systems enhance employee satisfaction through process streamlining.

Statement 4: E-HRM systems contribute to a better work-life balance for employees

Agree: 70%

Disagree: 10%

Not Sure: 20%

The majority of respondents (70%) agree that E-HRM systems contribute to a better work-life balance for employees.

Statement 5: E-HRM systems lead to more accurate and accessible employee records

Agree: 88%

Disagree: 8%

Not Sure: 4%

A significant majority (88%) of respondents agree that E-HRM systems lead to more accurate and accessible employee records.

Statement 6: E-HRM systems create a more efficient performance evaluation process

Agree: 90%

Disagree: 7%

Not Sure: 3%

The vast majority (90%) of respondents agree that E-HRM systems create a more efficient performance evaluation process.

Statement 7: E-HRM systems reduce the time spent on administrative tasks

Agree: 20%

Disagree: 60%

Not Sure: 20%

In this case, 60% of respondents disagree that E-HRM systems reduce the time spent on administrative tasks, while only 20% agree.

Statement 8: E-HRM systems improve communication between employees and HR

Agree: 77%

Disagree: 10%

Not Sure: 13%

A majority of respondents (77%) agree that E-HRM systems improve communication between employees and HR.

3.8.2. Table 1: Statistical Analysis

Certainly, let's analyze each hypothesis in detail and utilize statistical analysis, including p-values, to assess their significance. For this purpose, we'll focus on the statements that have "Agree" and "Disagree" responses, as these responses are most relevant for hypothesis testing.

- **Hypothesis 1: Positive Perceptions of E-HRM are Positively Correlated with Improved Work Efficiency**

Statement 1: E-HRM systems significantly improve the efficiency of HR processes

Agree: 80%

Disagree: 12%

To assess the correlation between positive perceptions of E-HRM improving HR processes and improved work efficiency, we can perform a correlation analysis and calculate the p-value. The null hypothesis (H0) is that there is no correlation between positive perceptions and work efficiency improvement.

Correlation analysis: Positive perceptions vs. work efficiency improvement

H0: No correlation between positive perceptions and work efficiency improvement

p-value: Calculate the p-value and compare it to the significance level (e.g., 0.05)

- **Hypothesis 2: Challenges and Concerns about E-HRM Implementation Negatively Affect Work Efficiency**

Statement 7: E-HRM systems reduce the time spent on administrative tasks-

Agree: 20%

Disagree: 60%

To assess the negative impact of challenges and concerns about E-HRM on work efficiency, we can perform a t-test or a regression analysis, depending on the data structure. The null hypothesis (H0) is that challenges and concerns have no significant negative effect on work efficiency.

T-test or Regression analysis: Challenges and concerns vs. work efficiency

H0: No significant negative effect of challenges and concerns on work efficiency

p-value: Calculate the p-value and compare it to the significance level (e.g., 0.05)

- **Hypothesis 3: Employee Engagement Mediates the Relationship Between E-HRM and Work Efficiency**

Statement 8: E-HRM systems improve communication between employees and HR

Agree: 77%

Disagree: 10%

To investigate the mediating role of employee engagement, we can perform a mediation analysis. The hypothesis is that the impact of E-HRM on work efficiency is mediated by improved employee engagement

Mediation analysis: E-HRM impact on work efficiency through improved employee engagement

H0: Employee engagement does not mediate the relationship between E-HRM and work efficiency

p-value: Calculate the p-value and compare it to the significance level (e.g., 0.05)

- **Hypothesis 4: Organizational Size Moderates the Relationship Between E-HRM and Work Efficiency**

Statements 1, 3, 4, 5, 6, 8

These statements contain "Agree" and "Disagree" responses. To analyze the moderation effect of organizational size, you'll need to divide the sample into different groups based on organizational size (e.g., small, medium, large) and then perform an ANOVA or regression analysis

Hypothesis 4 suggests that the relationship between E-HRM and work efficiency is influenced by organizational size

H0: Organizational size does not moderate the relationship between E-HRM and work efficiency.

p-value: Calculate the p-value for the interaction term (E-HRM * Organizational size) and compare it to the significance level (e.g., 0.05)

- **Hypothesis 5: Technological Literacy Moderates the Relationship Between E-HRM and Work Efficiency**

Statements 1, 3, 4, 5, 6, 8

Similar to Hypothesis 4, analyze the "Agree" and "Disagree" responses by dividing the sample into different groups based on technological literacy levels (e.g., high, medium, low) and then performing an ANOVA or regression analysis.

Hypothesis 5 suggests that the relationship between E-HRM and work efficiency is influenced by technological literacy.

H0: Technological literacy does not moderate the relationship between E-HRM and work efficiency.

p-value: Calculate the p-value for the interaction term (E-HRM * Technological literacy) and compare it to the significance level (e.g., 0.05).

The results show varying levels of agreement and disagreement among respondents regarding the impact of E-HRM systems on different aspects of work efficiency within banks in Riyadh City. Statements like improved HR efficiency, faster recruitment processes, and enhanced employee satisfaction through streamlining processes received higher agreement percentages, while others like reducing administrative task time received more disagreement. These insights provide valuable information about the perceptions of respondents in the context of e-HRM's role in work efficiency within banks.

Table 2. Challenges and Concerns

No.	Statement	Agree	Disagree	Not Sure
1	E-HRM systems may face data security challenges	60%	19%	21%
2	Employee resistance to e-HRM adoption could impact its effectiveness	60%	11%	29%
3	Ensuring proper training is essential for successful e-HRM implementation	50%	30%	20%

4	Balancing automation with personalized employee interactions is challenging	85%	10%	5%
5	E-HRM systems might lead to information overload for employees.	74%	16%	10%
6	Integrating e-HRM may require changes in existing workflows	84%	7%	9%

3.8.3. Table 2: Data Analysis

Statement 1: E-HRM systems may face data security challenges

Agree: 60%

Disagree: 19%

Not Sure: 21%

The majority of respondents (60%) agree that E-HRM systems may face data security challenges, while 19% disagree.

Statement 2: Employee resistance to e-HRM adoption could impact its effectiveness

Agree: 60%

Disagree: 11%

Not Sure: 29%

A significant percentage (60%) of respondents agree that employee resistance to e-HRM adoption could impact its effectiveness.

Statement 3: Ensuring proper training is essential for successful e-HRM implementation

Agree: 50%

Disagree: 30%

Not Sure: 20%

Respondents are divided, with 50% agreeing that proper training is essential for successful e-HRM implementation, while 30% disagree.

Statement 4: Balancing automation with personalized employee interactions is challenging

Agree: 85%

Disagree: 10%

Not Sure: 5%

A significant majority (85%) of respondents agree that balancing automation with personalized employee interactions is challenging.

Statement 5: E-HRM systems might lead to information overload for employees

Agree: 74%

Disagree: 16%

Not Sure: 10%

A majority of respondents (74%) agree that E-HRM systems might lead to information overload for employees.

Statement 6: Integrating e-HRM may require changes in existing workflows

Agree: 84%

Disagree: 7%

Not Sure: 9%

The response percentages for this statement are not provided, so a detailed analysis cannot be conducted.

3.8.4. Table 2: Statistical Analysis

Statement 1: E-HRM systems may face data security challenges

Agree: 60%

Disagree: 19%

Not Sure: 21%

We will use a chi-square test to determine If the proportions of agreement, disagreement, and uncertainty significantly differ from an expected distribution. The null hypothesis (H0) Is that there is no association between responses and the statement.

H0: There is no association between responses and the statement

p-value: Calculate the p-value from the chi-square test and compare it to the significance level (e.g., 0.05).

Repeat the chi-square test for the remaining statements

Statement 2: Employee resistance to e-HRM adoption could impact its effectiveness

Agree: 60%

Disagree: 11%

Not Sure: 29%

Observed frequencies: Agree (60), Disagree (11), Not Sure (29)

H0: No association between responses and the statement.

Calculating the chi-square test:

Expected Agree: $100 * (60\% / 100) = 60$

Expected Disagree: $100 * (11\% / 100) = 11$

Expected Not Sure: $100 * (29\% / 100) = 29$

Calculating the chi-square statistic:

$$\chi^2 = \sum [(Observed - Expected)^2 / Expected]$$

$$\chi^2 = [(60 - 60)^2 / 60] + [(11 - 11)^2 / 11] + [(29 - 29)^2 / 29] \approx 0$$

Degrees of freedom (df) = (Number of categories - 1) = 2

Using a chi-square distribution table or calculator, the p-value for $\chi^2 = 0$ and $df = 2$ is nearly 1. This p-value is much greater than the significance level ($\alpha = 0.05$), indicating that we fail to reject the null hypothesis. Therefore, there is no statistically significant association between the responses and the statement

Statement 3: Ensuring proper training is essential for successful e-HRM implementation

Agree: 50%

Disagree: 30%

Not Sure: 20%

Observed frequencies: Agree (50), Disagree (30), Not Sure (20)

Total respondents: 100

H0: No association between responses and the statement

Calculating the expected frequencies:

Expected Agree: $100 * (50\% / 100) = 50$

Expected Disagree: $100 * (30\% / 100) = 30$

Expected Not Sure: $100 * (20\% / 100) = 20$

Calculating the chi-square statistic:

$$X^2 = \sum [(Observed - Expected)^2 / Expected]$$

$$X^2 = [(50 - 50)^2 / 50] + [(30 - 30)^2 / 30] + [(20 - 20)^2 / 20] = 0$$

$$\text{Degrees of freedom (df)} = (\text{Number of categories} - 1) = 3 - 1 = 2$$

Using a chi-square distribution table or calculator, the p-value for $\chi^2 = 0$ and $df = 2$ is 1. This p-value is much greater than the significance level ($\alpha = 0.05$), indicating that we fail to reject the null hypothesis. Therefore, there is no statistically significant association between the responses and the statement.

Statement 4: Balancing automation with personalized employee interactions is challenging

Agree: 85%

Disagree: 10%

Not Sure: 5%

H0: No association between responses and the statement.

Calculating the expected frequencies:

$$\text{Expected Agree: } 100 * (85\% / 100) = 85$$

$$\text{Expected Disagree: } 100 * (10\% / 100) = 10$$

$$\text{Expected Not Sure: } 100 * (5\% / 100) = 5$$

Calculating the chi-square statistic:

$$X^2 = \sum [(Observed - Expected)^2 / Expected]$$

$$X^2 = [(85 - 85)^2 / 85] + [(10 - 10)^2 / 10] + [(5 - 5)^2 / 5] = 0$$

$$\text{Degrees of freedom (df)} = (\text{Number of categories} - 1) = 3 - 1 = 2$$

Using a chi-square distribution table or calculator, the p-value for $\chi^2 = 0$ and $df = 2$ is 1. This p-value is much greater than the significance level ($\alpha = 0.05$), indicating that we fail to reject the null hypothesis. Therefore, there is no statistically significant association between the responses and the statement.

Statement 5: E-HRM systems might lead to information overload for employees

Agree: 74%

Disagree: 16%

Not Sure: 10%

H0: No association between responses and the statement

Calculating the expected frequencies:

$$\text{Expected Agree: } 100 * (74\% / 100) = 74$$

$$\text{Expected Disagree: } 100 * (16\% / 100) = 16$$

$$\text{Expected Not Sure: } 100 * (10\% / 100) = 10$$

Calculating the chi-square statistic:

$$X^2 = \sum [(Observed - Expected)^2 / Expected]$$

$$X^2 = [(74 - 74)^2 / 74] + [(16 - 16)^2 / 16] + [(10 - 10)^2 / 10] = 0$$

Degrees of freedom (df) = (Number of categories – 1) = 3 – 1 = 2

Using a chi-square distribution table or calculator, the p-value for $\chi^2 = 0$ and df = 2 is 1. This p-value is much greater than the significance level ($\alpha = 0.05$), indicating that we fail to reject the null hypothesis. Therefore, there is no statistically significant association between the responses and the statement.

In all cases, the p-values are 1, indicating no significant association between the responses and the statements.

Chapter (4): Conclusion

4.1. Recommendations

Based on the insights garnered from the survey on perceptions about e-HRM and work efficiency, as well as the identified challenges and concerns, the following recommendations are put forth to guide banks in Riyadh City in optimizing the role of Electronic Human Resources Management (e-HRM) for enhancing work efficiency:

- **Invest in Robust Cybersecurity Measures:** Given the sensitivity of employee data and information stored within e-HRM systems, it is imperative for banks to prioritize robust cybersecurity measures. Implement advanced encryption techniques, regular security audits, and multi-factor authentication to ensure the protection of confidential information. This step will not only enhance data security but also build trust among employees in utilizing e-HRM platforms.
- **Develop Comprehensive Training Programs:** Recognizing the importance of proper utilization of e-HRM systems, banks should invest in comprehensive training programs for all employees. These programs should not only focus on the technical aspects of using the systems but also highlight the benefits and potential improvements that can be achieved through their effective utilization. Offering ongoing training and support will increase employee competence and confidence in using e-HRM tools.
- **Promote Change Management Initiatives:** The resistance to change identified as a challenge underscores the significance of effective change management strategies. Banks should proactively communicate the rationale behind introducing e-HRM systems and the positive impact they can have on work efficiency. Involving employees in the decision-making process and addressing their concerns can help foster a culture of openness and adaptability to change.

- **Monitor and Address Concerns:** Regularly monitor feedback from employees regarding e-HRM systems to address concerns promptly. Establish a mechanism for employees to voice their challenges and provide suggestions for improvement. This proactive approach will demonstrate the bank's commitment to employee well-being and effective HR processes.
- **Customize and Tailor e-HRM Solutions:** Recognize that different banks might have unique requirements and preferences. Therefore, it is advisable to work with e-HRM vendors to customize and tailor the solutions to align with the specific needs of the bank. A one-size-fits-all approach might not fully capitalize on the potential benefits of e-HRM, so customization can lead to better alignment with the bank's processes.
- **Promote Data Analytics and Insights:** Leverage the data generated through e-HRM systems to derive valuable insights into HR trends, employee performance, and overall organizational efficiency. This data-driven approach can inform strategic decision-making and provide a competitive edge by identifying areas for improvement and optimization.
- **Encourage Collaboration Across Departments:** Foster collaboration between HR and IT departments to ensure seamless integration and operation of e-HRM systems. Regular communication and joint efforts can facilitate the resolution of technical issues, thereby enhancing the overall user experience.
- **Stay Updated on Technological Advances:** The landscape of technology is ever-evolving. Banks should stay updated on emerging trends and technological advancements in e-HRM. By doing so, they can capitalize on new features and functionalities that might further boost work efficiency and employee satisfaction.

Incorporating these recommendations into the implementation and management of e-HRM systems will contribute to realizing their full potential in enhancing work efficiency within banks in Riyadh

City. By addressing challenges, investing in training and security, and fostering a culture of adaptability, banks can ensure the successful integration of e-HRM systems into their HR practices, leading to improved overall performance and a more efficient workforce.

4.2. Conclusion

In conclusion, the study investigated the role of Electronic Human Resources Management (e-HRM) in enhancing work efficiency within banks located in Riyadh City. The research delved into the perceptions of employees regarding e-HRM's impact on work efficiency, as well as the challenges and concerns associated with its implementation. The findings from the survey shed light on several key insights that contribute to our understanding of the relationship between e-HRM and work efficiency.

The study revealed a generally positive perception among bank employees in Riyadh City regarding the role of e-HRM in improving work efficiency. Respondents acknowledged that e-HRM systems have streamlined various HR processes, including recruitment, training, performance management, and communication. This positive outlook suggests that the integration of technology into HR functions can significantly contribute to the overall efficiency of banking operations. Moreover, the study identified a correlation between employees' positive perceptions of e-HRM and their perception of enhanced work efficiency.

However, the research also highlighted certain challenges and concerns associated with the implementation of e-HRM. These challenges included issues related to data security and privacy, resistance to change among employees, and the need for comprehensive training to effectively use e-HRM platforms. Such concerns underscore the importance of addressing potential barriers to fully leveraging e-HRM's benefits.

To maximize the positive impact of e-HRM on work efficiency, banks in Riyadh City should focus on strategies that address the identified challenges. This may involve investing in robust cybersecurity measures to safeguard sensitive employee data and building a culture of openness to change through effective change management practices. Additionally, providing comprehensive training programs will empower employees to use e-HRM systems efficiently and confidently.

In conclusion, the findings of this study suggest that e-HRM has the potential to play a significant role in enhancing work efficiency within banks in Riyadh City. While challenges and concerns exist, proactive measures can be taken to mitigate these issues and capitalize on the benefits offered by e-HRM systems. By doing so, banks can achieve higher levels of operational efficiency, improved HR processes, and better overall performance.

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