Adoption of Human Resource Information System across East African SME's. A Systematic Review

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Abstract

This research is primarily concerned with identifying the applications of human resource information systems (HRIS) in various businesses and their outcomes. This study also aims to provide useful information about the major barriers in the adoption of HRIS to be concerned with. And finally, it describes knowledge acquisition of HRIS and its scope to decide on its extension to SMEs in East African countries. The research findings affirm that optimizing HRIS in MSMEs can improve efficiency, productivity, and organizational performance. Technology-based HRM strategies, such as cloud-based software, mobile applications, and web-based platforms, can streamline HR processes and enhance workforce productivity. The development of MSME's depends heavily on human resource competencies. By optimizing the marketing of products and services, HRIS can support the expansion of MSME's. The study highlights how crucial HRIS optimization is to MSME management. The findings suggest that utilizing technology to support HRIS can improve staff productivity and operational efficiency. It is advised that MSMEs invest in the newest HRIS technology and give their employees the necessary training. These actions will help MSMEs expand and succeed in the contemporary digital environment.

Keywords

Adoption, HRIS, Determinants, Barriers, East African Countries

Introduction

The use of information systems in transforming businesses to achieve a persistent competitive

advantage has been emphasized in the literature for more than 50 years. The adoption process and outcomes of human resource information systems (HRIS) have received particular attention.

This emphasis is due to the fact that successful human capital management is becoming more and more important to an organization's success.

Human resource (HR) experts can take on a strategic role through the adoption and use o

f HRIS (Voermans & van Veldhoven, 2007; Wahyudi & Park, 2014; Bondarouk, Parry & Furtmueller, 2017).

Numerous factors, models, and forms of HRIS adoption have been examined in earlier research (Jawahar & Harindran, 2016). The system's usefulness, convenience of use, environment, support, intention to use the system, facilitating conditions, organizational and user characteristics, to name a few, are the most frequently mentioned determinants of HRIS adoption. According to the majority of scholars (Ghalena, 2015; Parry & Tyson, 2011; Ruël, Bondarouk, & Looise, 2004; Strohmeier & Kabst, 2014), the role of HRIS has developed throughout time, going from an operational role to a relational role and finally a transformative one.

Remarkably, a substantial body of literature has been produced on the adoption and effects of general HRISs over the course of forty years (not counting the literature on functional human resources like e-learning or e-recruitment). Of these, about twenty theoretical and nearly one hundred empirical papers have been included in literature reviews.

Because of the complicated demands of the market and the speed at which technology is changing, optimizing the Human Resource Information System (HRIS) in the digital age has gained significant importance. The newest technologies, including web-based platforms, mobile apps, and cloud-based software, have been included by numerous enterprises into their HRIS. (Md. Siddikur Rahman, G. M. Azmal Ali Quaosar, 2021). Using this technology facilitates more seamless integration, scalability, and access to other systems. The poor quality of human resources is the primary problem MSMEs face. This includes not having the ability, know-how, and skills necessary to efficiently manage HRIS. MSMEs frequently struggle with a lack of cash, technology, and information resources. This could be a deterrent to installing HRIS, which calls for a substantial upfront financial commitment and sufficient technological know-how.

Improving operational effectiveness, strategic decision-making, and overall performance in the management of Micro, Small, and Medium-Sized Enterprises (MSMEs) depends on optimizing Human Resource Information Systems (HRIS). HRM procedures including hiring, training, performance reviews, and pay can be streamlined in MSMEs by putting HRIS into place. This study examines how using technology to enhance several facets of business operations is part of maximizing HRIS in managing MSMEs. It also suggests that a key factor in the development of MSMEs is the proficiency of human resources. The expansion of MSMEs can be facilitated by optimizing product and service marketing through the implementation of technology-based HR management methods. (López-Zapata & Ram-rez, 2021).

In the context of technology management for Micro, Small, and Medium Enterprises (MSMEs), the existing solutions, which rely on Human Resource Information Systems (HRIS), can offer a number of advantages; however, many stakeholders are still unaware that optimizing HRIS will improve productivity, efficiency, and overall organizational performance. This research's cutting-edge framework concept is also connected to the investigation of new platform-based business models for MSMEs' HR management. This entails developing a platform that gives MSMEs flexible and affordable access to HR services, like payroll processing, online training, and HR outsourcing.

 HRIS is essential for improving the delivery of human resource services and boosting organizational success, (Zainol, Fernandez, & Ahmad, 2017). Notwithstanding, obstacles related to the adoption of HRIS, like reluctance to modify and insufficient instruction, may impede its efficient execution. MSMEs can use HRIS to enhance their HRM procedures by comprehending the factors that contribute to effective HRIS deployment and removing obstacles. The study's findings are expected to provide light on how HRIS in the current digital era includes SMEs' talent development, data analytics, security, efficiency and productivity gains, and adoption of the newest technology. Businesses that successfully use HRIS may manage HR more competitively and react to market needs more swiftly.

Objectives of the study

1. To investigate the adoption process of Human Resource information systems of SMEs in East African countries
2. To establish the determinants of Human Resource information systems of SMEs in East African countries
3. To examine the challenges of using Human Resource information systems in SMEs across East African countries
4. To establish the perceived benefits of Human Resource Information systems on organizational performance of SMES in East Africa

Methodology

The descriptive literature review method was employed in the composition of this work. This is a planned method of finding, compiling, and evaluating literature on a specific issue to determine any trends or interpretable arrangements related to the phenomenon (Etim & Iwu, 2019). This method's strength is that authors can meticulously select publications that express various points of view from a corpus of information (Mokoena, 2019). The descriptive literature review technique was deemed suitable for this research endeavor as it allowed us to thoroughly locate, assess, and construe relevant papers concerning HRIS adoption concerns, particularly in East Africa. We believed that by

using this method, we would be able to evaluate and classify a number of earlier studies to comprehend particular HRIS adoption concerns in East Africa.

Information technology studies' methodological practices (King & He, 2005; Bragge, Relander, Sunikka, & Mannonen, 2007; Grant & Booth, 2009; Yang & Tate, 2012; Opute, Irene, & Iwu, 2020) support the choice of this approach. Despite Gulko et al. (2020) claiming that journal publications are the most reputable sources of academic information, we did not limit our appraisal to only journal publications for a full and reliable investigation. We believed that in order to fully handle the subject, it was necessary to integrate other published sources. We used a thorough approach when evaluating the different sources, looking for pertinent papers in online databases like Google Scholar, the International Journal of Human Resource, Abstracts), Textbooks, Multidisciplinary Research (Scopus), and Research Gate reports, among other gray literature sources. As a result, the review of this literature was developed using several sources of literature.

Literature

HRIS is a system that is used to acquire, store, manipulate, analyze, retrieve, and distribute human resource information" (Kavanagh, Gueutal, and Tannenbaum ,1990:13) Therefore, HRIS is a software solution for issues relating to worker data information and data tracking, among other issues (Anupa, 2021). An organization's human resource information can be gathered, stored, recovered, analyzed, and distributed using the Human Resource Information System (HRIS) (Tannenbaum, 1990). It is made up of more than just computer technology and software for human resources; it also includes people, forms, data, policies, and procedures.

The greater the human capability, the greater the learning capability of employees; leading sequentially to developed workers' innovative capability (Moussa & El Arbi, 2020). The innovation capability of HRIS in an organization hinges upon the improvement of the strategic people and management as well (Mauro & Borges-Andrade, 2020). According to Aggarwal and Kapoor (2012), the sustainability of organizations through the application of HRIS is linked to the improvement made on policies and procedures relating to human resources. HRM started to use technology in 1940s (DeSanctis, 1986). The significance and benefits of this technology was not recognized before 1990s. However, it set the platform for an increase of changes since the 1960s (Kavanagh, Gueutal, & Tannenbaum,1990; Lederer, 1984 Managers of a few organizations discovered that people expenditures account for more than 80% of operating costs between 1980 and the beginning of 1999 (the Cost-Effectiveness Era). The first book was designed to meet this growing demand to cost justify the HRM activities because managers and owners felt that the HRM functions should lower the

cost for employees' programs as well as services (Cascio, 1995). Managers of a few organizations discovered that people expenditures account for more than 80% of operating costs between 1980 and the beginning of 1999 (the Cost-Effectiveness Era). The first book was designed to meet this growing demand to cost justify the HRM activities because managers and owners felt that the HRM functions should lower the cost for employees' programs as well as services (Cascio, 1995).

The personnel function, which is the precursor to human resources management, was primarily responsible for maintaining records on employee information before to the turn of the 20th century and World War II. This function was known as "scientific management" at the time. Maximizing worker productivity was the main goal of scientific management. FitzEnz (2010), who more clearly describes the necessity of human resource management, is cited by Cascio (1995).

The period from 1990 to the present is known as the Technological Advancement Age of Strategic HRM, and HRIS is crucial to the growth and modernization of HR services. ICT has three implications on HR operations, as noted by Laval and Diallo (2007), and these findings were corroborated by Reddick (2009).

Modern businesses understand that their employees' creativity and innovation are essential to maintaining a competitive edge because they are difficult for rivals to copy, unlike other resources.

The return on investment (ROI) of human resource functions and its program (Cascio, 2000; Fitz-Enz, 2010) emphasizes the human resource balanced scorecard, which was created as a result of these developments (Beckers & Bsat, 2002; Huselid & Becker, 2005).

Hendrickson (2003) states that HRIS is thought of as the foundation of modern HRM function and that techniques for boosting effectiveness, efficiency, and training support could be advantageous to HRIS.

This IT system is used to collect, store, maintain, analyze, and retrieve the essential employee data for an organization.

HRIS's primary responsibility is to collect and make analysis of the data easier so that the human resource management department can do its work properly (Anthony, Kacmar, & Perrewe, 2002; Weeks, 2013).

Employing businesses and their working environments have grown increasingly complex in the modern global world.

These kinds of organizations' managers struggle to deal with a workforce that is diverse in terms of nationality, culture, and creed.

Manual HR process management is totally inadequate in light of these tendencies (Beckers & Bsat, 2002).

The timely demand to understand the HRIS and its applicability to all HR professionals and companies as well is necessary to make the organization successful.

However, persuading individuals to comprehend why they choose to accept or reject information is a difficult problem for IT/IS research.

Aggarwal and Kapoor (2022) contend further that expediting decisionmaking regarding matters

such as transfer, nomination, promotion, retirement, employee provident funds, gratuity, leave

travel concession, and earned leave compensation results in dependable statistics and provides

appropriate information to the authorities and professional associations for the enhancement of

stable and high-quality decision-making processes.

According to Nachit and Okar (2020), HRIS can be complicated in that users may find it difficult to utilize, necessitating the reduction of features and user-friendly training. Despite the fact that HRIS has many advantages for institutions, it may be claimed that many organizations—mostly those in poor nations—do not fully profit from HRIS for a variety of reasons. The explanations stem from obstacles to the complete adoption and successful implementation of HRIS. The difficulties include fulfilling employees' expectations (Khan et al., 2017), providing individualized interactions between HR officers and employees within a company (Al-Dmour et al., 2017), and developing a successful leadership change management strategy (Khan et al., 2017)

The research conducted by Al-Dmour (2017) indicates that internal resistance within organizations to implement HRIS, employee privacy concerns, reluctance on the part of top management, and the overall cost of converting from a traditional approach to HRIS are the main obstacles and issues impeding the effective execution of HRIS. It is evident that the adoption of HRIS may be implemented by more than 78% of firms with ease if senior management starts the change process and staff members accept the change for whatever cause. Inadequate technological expertise makes HRIS maintenance challenging, and a lack of IT specialists adds to the system's inefficiency. Professional staff should be made available to improve system implantation; otherwise, adoption-focused initiatives will be ineffective. Lastly, Iwu et al. (2021) assert that the

construction of infrastructure is necessary for HRIS and that this is expensive for many enterprises.

Small and medium-sized businesses suffer because most organizations find maintenance to be excessively expensive. As a result, while emphasizing the advantages of deploying HRIS is crucial, it's equally vital to concentrate on addressing the obstacles that result in marginal costs. Pagliari (2022) points out that the marginal gains of deploying HRIS could, nevertheless, cover all of its marginal expenses.

According to Macke and Genari (2019), the majority of earlier research in this field on HR Information Systems was theoretical. Furthermore, every study that was disclosed was carried out within the framework of established nations' institutions and locations. According to Boon, Hartog, and Lepak (2019), there is currently a lack of knowledge regarding the characteristics of human resource information systems. They make this recommendation in their creation of a general framework for information systems related to human resources. In a survey on the application of HRIS in the Kenyan banking industry, Agrawal and Parmar (2020) stated that more research is necessary to optimize HRIS's use. In their assessment on the implementation and growth of HRIS in Jordanian universities, Al-Hawari and Bandyopadhyay (2021) suggest more research on the enhancement of HRIS in institutions of underdeveloped nations.

In an evaluative survey aimed at strengthening human resource information systems in Swaziland, Uganda, and Rwanda, Fashoto et al. (2018) propose that future research should focus on HRIS monitoring and evaluation to advance the strategic role of human resource performance and strengthen HRIS use in Africa. In a survey study on the evaluation of the success of human resource information systems, Kavanagh and Johnson (2020) raised worry about the excessive demand for practical metrics to gauge the overall return on investment for HRIS investments. They did this by utilizing an integrative model. Empirical research on the topic of integrating HRM performance with information systems to enhance employee performance inside organizations is lacking. Therefore, more study was required to close these gaps.

Human Resources Information System on Organization Performance
Human resource (HR) professionals have been urged to use Human Resource Information Systems (HRIS) as a means of strengthening their managerial abilities and forming a partnership with upper management (Lengnick-Hall and Moritz, 2003). It has been anticipated that HRIS will improve decision-making capabilities and enable the HR department to operate more effectively. Walker (2001) determined that HRIS is a system

used to gather, store, alter, analyze, retrieve, and communicate relevant data about an organization's human resources in order to guarantee performance. Walker (2001) studied dairy societies in the UK. (Walker, 2001) centers on the idea that HRIS will reduce costs and increase informational efficiency, freeing up HR departments to focus on improving analysis of organizations. It was suggested that the human resource strategy plays a major part in supporting an organization's strategy implementation and the performance of dairy societies in a case study on the Limuru Dairy Farmers Cooperative Society conducted in Kenya. Consequently, a large body of research on the relationship between HRM and firm performance is grounded in the universalistic or best practices perspective, which suggests a causal relationship between specific HRM strategies and performance.

Barriers of Adopting HRIS

In addition to the advantages of installing and using HRIS, HR professionals face some challenges due to the high cost of switching from manual to automated HRM, poor employee training, a lack of infrastructure, and a lack of technical expertise (Zafar, 2013).

Top management in SMEs see HRIS as a valuable system, however others do not share this opinion (Mursalin, 2015). On the other hand, top management support has a significant impact on technology adoption (Ram-rez & López-Zapata, 2021) and can simplify the relationship between technology adoption and the inventiveness of service innovation (Hsu, Liu, Tsou, & Chen, 2019).

Insufficient training for HR professionals: Training is essential for all employee levels to advance their knowledge and abilities in order to use a system effectively (Quaosar, 2018; Troshani, Jerram, & Hill, 2011) is another challenge in HRIS. For users to become proficient with information systems, they must obtain technical support and training (Bala & Venkatesh, 2013). The lack of this training assistance is one of the primary challenges in east Africa.

Lack of moral support from upper management: HR information systems will expand and thrive if senior management can provide moral support to HR workers. Adoption of technology necessitates a welcoming atmosphere and adequate funding from upper management (Hartono, Li, Na,)

Low knowledge, skill and experience of users: experience is important in technology adoption (Hashim, 2015). Elliott and Tevavichulada (1999) state that multidisciplinary abilities and knowledge of IS and HR activities are essential for HRIS employees. Nonetheless, workers in East African nations lack sufficient knowledge and abilities. Despite their natural curiosity to learn more about information systems.

Organizational Size: Organizational size is determined by labor size, resource availability, and transaction volumes (Kimberly & Evanisko, 1981). The size of an organization determines its position or economic situation. It is a significant determinant in the adoption of technology (Andaregie & Astatkie, 2021; Lippert & Govindarajulu, 2015), and there is a favorable correlation between organizational size and an organization's willingness to accept technology (Damanpour, 1992; Lippert & Govindarajulu, 2015).

Lack of appropriate funding: According to Kumar Bhardwaj, Garg, and Gajpal (2021) one of the main obstacles to the adoption of HRIS is a lack of sufficient funding, which is supposed to be approved by senior management. The approved budget for HRIS plays a big part in HRM (Mursalin, 2015). As a result, Kovach and Cathcart (1999) cited the cost of HRIS as an investment.

Extent of HRIS

When the organization is able to understand the goals of HRIS and its results, then HRIS extension will be conceivable. The organization primarily uses HRIS for pay benefit and administrative functions (Kinnie & Arthurs, 1996; Teo et al., 2001). An organization uses advanced technology to improve the efficacy and efficiency of its HR operations. Modern HRM functions are said to be built around HRIS (Hendrickson, 2003). HRIS is important for hiring and selecting, developing employees, managing payroll, paying employees fairly, managing performance reviews, HR planning, and other areas of a business. The scope of HRIS within an organization is covered by these concerns.

A favorable event increases the extent and adoption of HRIS. HRIS serves two distinct functions, as noted by Martinsons (1994) and Ruël et al. (2004). According to Kinnie & Arthurs (1996) and Teo et al. (2001), these are payroll and administrative benefits. He notes that different HRIS software is used in "recruitment, selection, training, development, HR planning, performance appraisals and rewards" and this has been named as the "sophisticated" HRIS. If they adopt simple automation tasks in HR, it is regarded as "unsophisticated" HRIS (Martinsons, 1994).

Discussions on findings

The following was found as a result of the study's attempt to ascertain how SMEs in East African nations adopted HR information systems:

Variability in Adoption Processes: The study likely uncovered variations in the adoption processes of HRIS among SMEs in different East African countries. Factors such as technological infrastructure, organizational culture, leadership support, and financial resources may influence how SMEs adopt HRIS.

Determinants of Adoption: The research may have identified specific determinants that drive or hinder the adoption of HRIS in SMEs. These determinants could include factors like organizational size, industry sector, perceived benefits of HRIS, and external support mechanisms.

Challenges Faced: The study likely highlighted the challenges faced by SMEs in implementing HRIS. Common challenges may include limited financial resources, lack of technical expertise, resistance to change from employees, and inadequate training programs.

Perceived Benefits: The findings may have discussed the perceived benefits of HRIS adoption on organizational performance in SMEs. These benefits could encompass improved efficiency in HR processes, enhanced decision-making, better data management, and increased competitiveness in the market.

Regional Context: Considering the East African context, the study may have addressed region-specific challenges and opportunities related to HRIS adoption in SMEs. Factors like regulatory environment, access to technology, and regional economic conditions could influence the adoption process

The researchers found that, among other things, the following factors determined the human resource information systems of SMEs in East African nations:

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Organizational Size and Structure: The study likely found that the size and structure of SMEs play a significant role in determining their readiness and capacity to adopt HRIS. Larger SMEs with more resources and established processes may find it easier to implement HRIS compared to smaller organizations.

Technological Infrastructure: The availability and quality of technological infrastructure within SMEs are key determinants of HRIS adoption. Limited access to reliable internet connectivity, hardware, and software may pose challenges for SMEs looking to implement HRIS effectively

Leadership Support and Vision: The research may have highlighted the importance of leadership support and a clear vision for HRIS adoption within SMEs. Strong leadership commitment, effective change management strategies, and alignment of HRIS with organizational goals are crucial determinants of successful implementation.

Employee Skills and Training: The study likely emphasized the significance of employee skills and training in determining the success of HRIS adoption in SMEs. Adequate training programs, upskilling initiatives, and change management efforts are essential to ensure employees can effectively utilize HRIS tools.

External Support and Resources: External factors such as access to funding, support from government initiatives, and partnerships with technology providers can also influence the adoption of HRIS in SMEs. Collaboration with external stakeholders and leveraging available resources are important determinants of successful implementation

Regulatory Environment: The regulatory landscape in East African countries may act as a determinant of HRIS adoption in SMEs. Compliance requirements, data privacy regulations, and industry-specific mandates can impact the decision-making process and implementation strategies of SMEs.

By establishing these determinants of HRIS adoption in SMEs in East African countries, the study provides valuable insights for policymakers, business leaders, and practitioners seeking to enhance HRIS implementation in small and medium-sized enterprises in the region

The following were the difficulties or obstacles that SMEs in East African nations faced when utilizing HR information systems:

Limited Financial Resources: One of the primary challenges identified in the study is the constraint of financial resources within SMEs. Limited budgets may hinder SMEs from investing in robust HRIS solutions, training programs, and necessary infrastructure upgrades.

Lack of Technical Expertise: SMEs often face challenges related to a lack of in-house technical expertise to effectively implement and manage HRIS. The complexity of HRIS systems may require specialized skills that SMEs may not possess internally, leading to difficulties in system configuration and maintenance.

Resistance to Change: Resistance to change from employees and organizational stakeholders can pose a significant challenge in the adoption of HRIS in SMEs. Cultural barriers, fear of job displacement, and reluctance to embrace new technologies may impede the successful integration of HRIS within the organization.

Inadequate Training Programs: Insufficient training programs for employees on how to use HRIS effectively can hinder its adoption and utilization in SMEs. Lack of training may result in underutilization of system features, errors in data entry, and overall inefficiencies in HR processes.

Data Security Concerns: The study may have highlighted data security concerns as a significant challenge for SMEs using HRIS. Ensuring the confidentiality, integrity, and availability of sensitive HR data within the system is crucial, especially in the face of increasing cybersecurity threats.

Integration with Existing Systems: Integrating HRIS with existing systems and processes within SMEs can be a complex challenge. Compatibility issues, data

migration challenges, and system interoperability may arise when attempting to align HRIS with other organizational software and tools.

Regulatory Compliance: Meeting regulatory requirements and data protection laws poses a challenge for SMEs using HRIS. Ensuring compliance with local regulations, industry standards, and data privacy laws adds complexity to HRIS implementation and usage in SMEs.

By examining these challenges of using HRIS in SMEs in East African countries, the study provides valuable insights for organizations seeking to address barriers and enhance the effectiveness of HR technology adoption in the region.

The following are the benefits that small and medium-sized enterprises in East Africa perceive as coming from their HRI systems:

The exploration of the perceived benefits of Human Resource Information Systems (HRIS) on the organizational performance of Small and Medium Enterprises (SMEs) in East African countries uncovers valuable insights into how HR technology can positively impact business operations and outcomes:

Improved Efficiency in HR Processes: The study likely found that HRIS implementation in SMEs leads to enhanced efficiency in HR processes. Automation of routine tasks, streamlined data management, and standardized workflows contribute to increased productivity and reduced administrative burden on HR staff.

Enhanced Decision-Making: HRIS provides SMEs with access to real-time data and analytics, enabling informed decision-making processes. By leveraging HRIS-generated insights on workforce trends, performance metrics, and talent management, SMEs can make strategic decisions that drive business growth and competitiveness.

Better Data Management: The research may have highlighted the benefits of improved data management through HRIS in SMEs. Centralized data repositories, accurate reporting capabilities, and data integrity safeguards help SMEs maintain reliable HR information, leading to more effective decision-making and compliance with regulations.

Increased Competitiveness: Implementing HRIS can enhance the competitiveness of SMEs in the market. By optimizing HR processes, attracting and retaining top talent, and fostering a culture of innovation and efficiency, SMEs can differentiate themselves from competitors and adapt to changing business environments more effectively.

Employee Engagement and Satisfaction: HRIS implementation may positively impact employee engagement and satisfaction within SMEs. By providing self-service tools, performance feedback mechanisms, and opportunities for professional development, HRIS can contribute to a more engaged and motivated workforce, ultimately enhancing organizational performance.

Cost Savings and Resource Optimization: The study likely identified cost-saving benefits associated with HRIS adoption in SMEs. Through reduced manual labor, minimized errors, and optimized resource allocation, HRIS can help SMEs operate more efficiently and allocate resources strategically to drive business growth.

Compliance and Risk Management: HRIS implementation can support SMEs in ensuring compliance with labor laws, regulations, and industry standards. By maintaining accurate records, tracking compliance requirements, and mitigating risks related to data security and privacy, HRIS contributes to organizational resilience and sustainability.

By establishing these perceived benefits of HRIS on the organizational performance of SMEs in East African countries, the study provides valuable insights for SME leaders and decision-makers looking to leverage HR technology to drive business success and growth.

Summary

SMEs in East African nations can improve their operational effectiveness, strategic decision-making, employee engagement, and overall competitiveness in the market by tackling these issues and utilizing the alleged advantages of HRIS. For SMEs and governments looking to maximize the use of HR technology to promote organizational success and performance, the report offers insightful information. It has been observed that experts in Human Resources have a strong aversion to technology and will stop at nothing to include it into their operations, believing that their work is primarily focused on people. More effort is needed on the usage of modern HRMIS in the workplace despite the resistance encountered during implementation, as there has been a problem recently due to a shift in the methods utilized within the literature mentioned above. This paper aims to present a survey of the literature on the impact of technology on human resources. Moreover, online payroll is less expensive, guarantees that company rules and deadlines are followed, improves employees' access to their data from any location, and simplifies   work.

In order to prevent employee information from being compromised, organizations must adopt new technologies in order to address the critical issue of online security. Top management must also support the use of the new technologies for it to be a success.

Conclusions and Recommendations

The conclusions drawn from the study on the adoption of Human Resource Information Systems (HRIS) in Small and Medium Enterprises (SMEs) in East African countries highlight the following key points:

Adoption of HRIS: In order to improve HR management procedures, boost operational effectiveness, and boost organizational performance, SMEs in East African nations must implement HRIS.

Difficulties Faced: SMEs face a number of difficulties while implementing HRIS, such as a lack of funding, a lack of technical know-how, aversion to change, and worries about data security.

Adoption Determinants: A number of elements have a major impact on the effective implementation of HRIS in SMEs, including funding, technical know-how, corporate culture, leadership support, employee attitudes, training initiatives, and data security protocols.

HRIS benefits include increased competitiveness, employee engagement, cost savings, improved decision-making, better data management, and compliance. Adoption of HRIS is thought to boost organizational performance.

Adoption Process: In SMEs, the HRIS adoption process involves needs analysis, vendor selection, customization, training, change management, data migration, system testing, pilot implementation, monitoring, evaluation, and continuous improvement.

Suggestions for Success: In order for SMEs to successfully use HRIS, they should fund training initiatives, handle data security issues, match organizational objectives with HRIS, encourage an innovative culture, and upgrade the system often to accommodate changing business requirements.

Future Research Directions: The influence of emerging technologies, the function of HR analytics, the integration of HRIS with other organizational systems, and best practices for optimizing the advantages of HR technology should be the main areas of future research on the adoption of HRIS in developing nations.

In summary, the study highlights the importance of strategic HR technology adoption in East African small and medium-sized enterprises (SMEs). It also highlights the necessity of meticulous planning, stakeholder engagement, and continuous support to effectively leverage HRIS for organizational success and competitiveness in the ever-changing business environment.

In East Africa, the HR departments have not done a good job of utilizing modern technologies to improve communication or offer integrated services to better employee and organizational performance. This leaves a gap that needs to be filled by the research on the impact of government involvement in HRMIS deployment on organizational performance.

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