Hospitality 2.0: Decoding the Role of E-HRM in Innovation and Sustainability

Musrrat Parveen 1*, Afnan Abdulaziz Nazel Alraddadi 1**

1 Faculty of Economics and Administration, Department of Human Resource Management, King Abdulaziz University, Saudi Arabia
* Corresponding author: mpmohammed@kau.edu.sa

Type of manuscript: Research paper

Abstract: The aim of this research paper is to engage with the ongoing scientific discourse surrounding the impact of electronic human resources management (E-HRM) technology on organizational sustainability, performance, and innovation within the context of the dynamic Saudi Arabian hospitality industry. Drawing upon a quantitative research methodology, this study seeks to unveil the intricate relationship between the latent variable (e-HRM) and the dependent variables, namely, organizational innovation, organizational performance, and organizational sustainability. The systematic organization of literary sources and research approaches underpins the comprehensive nature of this study, which holds particular relevance against the backdrop of Saudi Arabia's ambitious Vision 2030 development plan. The plan envisions diversifying the economy, reducing dependence on oil, and fostering sustainable growth—objectives that resonate strongly with the challenges and opportunities within the hospitality sector. The paper progresses logically, employing robust statistical software such as SPSS version 25 and SmartPLS 3.3.5 to rigorously evaluate and test the measuring and structural models. This meticulous approach includes hypothesis testing to assess indicators' reliability, convergent validity, and discriminant validity. The study meticulously examines a sample of 438 employees within the Saudi hospitality industry. Methodological tools, including detection analyses and correlation analysis, are deployed to ensure the integrity and accuracy of the data. The Saudi hospitality industry is strategically selected for its pivotal role in job creation, economic prosperity, and overall image projection. Empirical analysis forms the crux of this paper, revealing compelling results that underscore the positive and significant influence of e-HRM technologies on organizational innovation, organizational performance, and organizational sustainability. The model's robust fit, as evidenced by the SRMR value of 0.074 and the NFI score of 0.911, accentuates the reliability and validity of the research. Furthermore, the paper employs the blindfolding technique to assess the model's predictive validity, revealing effect sizes of 0.223, 0.109, and 0.439 for organizational innovation, organizational performance, and organizational sustainability, respectively. This research not only empirically confirms but also theoretically substantiates the pivotal role of e-HRM technologies in shaping organizational outcomes. By delving into the mediating relationship between organizational performance and organizational innovation, this study contributes significantly to understanding how e-HRM technologies can be catalysts for organizational sustainability in the unique context of the Saudi hospitality industry. Beyond the academic realm, the findings provide actionable insights for policymakers, industry professionals, and stakeholders, aligning with the overarching goals of Saudi Vision 2030 to foster sustainable growth and development.

Keywords: Electronic HR management (E-HRM) technologies; human resources; performance metrics; sustainable growth.

Funding: There was no funding for this research.
1. **Introduction.** Saudi Arabia has experienced substantial social and economic changes driven by its recent tremendous growth. The primary objective of the Saudi Vision 2030 development plan is to achieve sustainable economic expansion and eliminate dependence on oil by promoting economic diversification. In this environment, the hospitality industry has undergone significant transformations, with considerable investments and reforms implemented to improve the country's international attractiveness as a vacation destination. Nevertheless, sustainability remains a substantial and urgent issue amidst these advancements. Implementing electronic human resource management technologies is a promising option for addressing sustainability issues in the Saudi hospitality industry.

E-HRM technologies modernize HR procedures and synchronize them with environmental objectives. This creative strategy uses electronic technologies to improve employee engagement, streamline labor management, and further increase the sustainability goals of the hotel industry (Alqarni et al., 2023). According to Parry & Tyson (2019), E-HRM technologies significantly influence how human resource management is currently practiced in the hospitality sector. This creative approach to HRM uses electronic technology to improve the efficacy and efficiency of HR operations in the industry by streamlining hiring, training, performance reviews, and employee engagement procedures. Additionally, sustainability is now a top priority in the hospitality sector and is constantly changing. The industry is paying close attention to the role of e-HRM technologies, as they work to reduce their environmental impact and increase their social responsibility. Shi & Wang (2019) proclaimed that streamlining HR procedures, including hiring, onboarding, and performance management, are one-way e-HRM technologies that improve organizational performance. Faster decision-making, more effective resource allocation, and more flexible reactions to shifting market conditions are made possible by automation and data analytics. This effectiveness improves financial performance by reducing expenses and increasing production (Masum et al., 2020). In terms of innovation, e-HRM technologies make it easier to find and develop talent. HR practitioners may identify high-potential individuals with data-driven insights, allowing firms to allocate resources where needed, hence fostering an innovative culture (Marler & Boudreau, 2016).

This research aims to fill this gap by examining the connection between e-HRM technologies and organizational sustainability, specifically focusing on how organizational performance and innovation act as mediators. This study's focus on this discrepancy enhances theoretical comprehension and practical implementation within the framework of Saudi Vision 2030. The originality of this research lies in its exploration of how e-HRM technologies intersect with sustainability objectives in the Saudi hospitality industry. This study investigates how e-HRM technologies can help to achieve long-term sustainability goals by analysing the mediating impacts of organizational performance and innovation. This study is essential for guiding sustainable HRM practices and teaching policymakers, HR specialists, and business professionals how to effectively use E-HRM technology tools. To promote the sustainability goals specified in Saudi Vision 2030. This study addresses a significant gap in the literature by examining the relationship between organizational sustainability and e-HRM within the Saudi Arabian hospitality sector. This research provides insights into how e-HRM technology can promote sustainability objectives by highlighting the mediating roles of innovation and performance. In addition, this study enhances our understanding of how E-HRM technology tools can be used to improve long-term corporate performance and provides practical suggestions for encouraging sustainability in the Saudi hotel industry. The study offers valuable insights derived from rigorous analysis and empirical data. These insights can drive strategic decision making and contribute to the broader socioeconomic development goals of Saudi Vision 2030.

The structure of the paper is as follows: first, an Introduction; second, a discussion of theoretical development and a literature review covering e-HRM technologies, organizational performance, organizational innovation, and organizational sustainability; third, an explanation of the methodology and research methods, including details of the research instrument and data processing methods used; fourth, the results and main findings are presented; fifth, there are dedicated sections for discussion; sixth, the conclusion addresses empirical, theoretical, and practical implications, as well as limitations and future directions for investigation.

2. **Literature Review.** The rapid adoption of electronic human resource management (E-HRM) systems is quickly transforming how organizations manage their HR functions and processes. It can increase efficiency, effectiveness, and accuracy in all vital components of organizational sustainability. It is no wonder this technology has become increasingly prevalent in recent years! This study delves into how e-HRM systems can promote sustainable outcomes by examining two key factors: innovation within an organization and improved overall performance. Resource-based view theory, developed by Barney (1991), is a powerful tool
for understanding how e-HRM technologies can enable organizations to become more sustainable. Rather than relying on external factors that may not be within the company's control, RBV suggests focusing instead on internal resources and competencies such as HR processes and technology. By doing so via e-HRM initiatives such as improved talent management or enhanced knowledge/skill sharing among employees, businesses can strengthen their competitive position while ensuring lasting success through sustainability efforts. Organizations are swiftly changing their HR activities and procedures due to the growing adoption of electronic human resource management (E-HRM) solutions. It can improve all crucial elements of organizational sustainability, including efficiency, effectiveness, and accuracy. This study explores how e-HRM systems might foster sustainable outcomes by focusing on two critical aspects: increased organizational innovation and overall performance. A valuable tool for comprehending how e-HRM technology might help firms become more sustainable is resource-based view theory, which Barney (1991) first proposed. The RBV advises concentrating on internal assets and competencies rather than relying on variables outside the organization's control, such as HR procedures and technology. Businesses can improve their competitive position while ensuring long-term success through sustainability initiatives via e-HRM initiatives such as improved talent management or better knowledge/skill sharing among employees. Organizational innovation may also mediate e-HRM technologies and organizational sustainability. Rogers' (1962) innovation diffusion theory (IDT) claims that adopting and using new technology can lead to innovation, which can help a company stay in business. Organizations may benefit from e-HRM solutions in terms of innovation if the time spent on HR operations is reduced, employee engagement is increased, and employee productivity and learning and development are bolstered. In the late 1980s, Judith Hale developed performance improvement theory (PIT) as a conceptual framework for analysing the factors that contribute to an organization's overall level of performance (Hale, 1986).

According to organizational performance theory (OPT), the performance of an organization is primarily determined by how well it manages its human resources. This is true for both the company's capital and its employees. E-HRM systems and other similar digital initiatives have made it possible to manage a company's human resources effectively (electronic human resource management). E-HRM, or E-HRM, standardizes and streamlines HR operations using computers and other electronic tools (Kumar & Choudhary, 2019). E-HRM helps firms survive by optimizing HR processes. E-HRM improves knowledge management, waste reduction, employee engagement and retention, and organizational agility.

2.1. Electronic Human Resources Management (E-HRM)

Since the 1980s, HR professionals have used IS for HR operations. Digitalization has increased commercial IS use (Voermans & Van Veldhoven, 2007). Electronic HR management is called "E-HRM" (Armstrong & Taylor, 2020). "Enterprise Human Resource Management" (E-HRM) is its full name. The HR functions are integrated and used. E-HRM uses technology to manage human resources. Examples include recruitment, training, performance reviews, and employee development. Bondarouk & Ruel (2019) combined traditional HRM approaches with technology, communication, recruiting and selection, training, performance management, salary and benefits, and performance management, which are managed electronically. E-HRM has also transformed HR management, allowing organizations to improve HR service efficacy, precision, and efficiency. E-HRM has transformed HR by making HR processes more exact, efficient, and effective. E-HRM supports organizations through e-recruitment and selection, electronic and virtual training, performance management, compensation and benefits, HRISs, and e-communication. They include cost and time savings, employee happiness, and better decision-making. According to Bondarouk & Ruel (2019), e-HRM efficiency depends on several factors. These variables include technology quality, employee engagement, and HR process alignment with company goals. E-HRM also allows companies to improve their HR operations and gain a competitive advantage. E-Recruitment and Selection: E-Recruitment and selection use digital channels to attract, screen, and select candidates. Technology has made e-recruitment and choice more popular, saving time and money while reaching more people. However, technical instruments require data security and confidentiality (Shoaib et al., 2015); this study revealed that Pakistani HR professionals prefer e-recruitment over traditional approaches. In contrast, Oyewobi & Okorie (2019) found that social media helps recruit entry-level employees.

Electronic and Virtual Training: E-learning platforms, virtual reality simulations, and webinars comprise virtual training. E-learning is adaptable, scalable, and cost-effective. Content, medium, and learner engagement determine this training's efficacy. Jowkar & Rezaei (2016) found that electronic movement retained and transferred knowledge better than classroom training. Another study found that virtual reality simulations trained hazardous-environment workers (Heidari et al., 2020).
E-Performance Management: E-performance management uses performance appraisal, feedback, and goal-setting tools to manage employee performance. E-performance management promotes continuous improvement with real-time monitoring and feedback. It was proposed that e-performance management systems improve manager–employee communication and motivation (Gomes et al., 2019). Another study found that e-performance management tools improve employee feedback and performance (Gomes et al., 2019).


Human Resources Information System (HRIS) and E-Communication: HRIS refers to the use of electronic tools to manage HR functions, such as employee data, attendance tracking, and performance management. HRISs and e-communication help organizations manage HR processes and communicate. As identified by (Vujovic & Ulhøi, 2018), an HRIS improves HR process efficacy, precision, and decision-making. It was also found that instant messaging and video conferencing improved team communication and collaboration. (Kappelman, et al., 2019).

2.2. Relationship between Electronic Human Resource Management (E-HRM) and Organizational Innovation (OI)

Fostering success in the digital era requires innovative HR management practices complemented by strategic technology utilization. Executives must assess their organization's needs and implement relevant goals and objectives that touch on cost efficiency enhancements, productivity boosts, and service optimization—all while leveraging modern tech solutions for improved human resources management across industries. E-HRM adoption is a powerful way for Dutch organizations to tap into their innovative power and improve performance. The research makes this clear: streamlining HR activities digitally provides an avenue through which forward-thinking companies can unlock the innovation potential within them (Jansen et al., 2013). A study conducted by Wang et al. (2014) revealed a surprising result: adopting EHRMS could have beneficial implications for innovation within Chinese organizations. By streamlining HR processes and providing data to decision-makers for sounder judgment, e-HRM has been shown to increase creativity with noteworthy outcomes. Organizations have long sought to innovate their labor operations, and e-HRM may be the answer. A study by Iqbal et al. (2018) concluded that implementing E-HRM could help firms grow and increase the quality of service. In addition, this research examined this relationship in Korean organizations with remarkable findings: adopting e-HRM can promote organizational innovation through improved HR processes and encouraging employee collaboration (Jansen et al., 2013). Building on the global trend of adopting electronic human resource management (E-HRM) systems conducted by Al-Matari et al. (2020), a literature review was conducted to evaluate how this trend impacts innovation in Saudi Arabia’s hospitality industry. Examining the existing research on e-HRM adoption and organizational development within this sector revealed potential areas for future study, which can further enhance our understanding of this relationship. Therefore, despite its significant contribution towards revitalizing the Saudi Arabian economy, more insight is needed into exploring e–HRM adoption in creating an innovative work environment within its hospitality domain. Leveraging e-HRM in the hospitality industry can provide powerful advantages. According to Al-Swidi & Mahmood (2012), utilizing this technology within the Saudi Arabian context could enhance HR effectiveness, employee satisfaction, and retention rates, all of which have the potential to create an enriching environment for organizational innovation. Organizations must be prepared to embrace change and invest in training methods to ensure that E-HRM adoption successfully promotes innovation within the Saudi Arabian hospitality industry. Al-Zubi's (2013) findings suggest that those companies that are more open to evolving trends have more significant potential for performance enhancement when utilizing this HR management system, a valuable key factor propelling the sector forward.

Employing e-HRM in the hospitality industry of Saudi Arabia has the potential to drastically improve employee collaboration, communication, and knowledge sharing, which are truly essential elements for innovation. Al-Hawari et al. (2020) observed similar impacts on Jordan's hospitality industry, where adopting such technological advances led to a surge in innovative processes—signifying that it could also have an equal effect if implemented here. The literature on e-HRM in the Saudi Arabian hospitality industry points to a clear opportunity for organizations—investing and embracing this technology could significantly enhance their performance, promote creativity and collaboration between staff members, and generate innovative solutions.
This research suggests that adopting e-HRM is essential for greater organizational success through increased innovation potential.

**H1a:** E-HRM has a positive and significant influence on organizational innovation.

2.3. Relationship between Electronic Human Resources Management (E-HRM) and Organizational Performance (OP)

According to Almashyakhi (2022), e-HRM substantially contributes to improving decision-making, human capital management, training, and employee performance evaluation, resulting in a strategic advantage. Abuhantash (2023) stated that e-HRM streamlines and automates various routine HR tasks, including payroll processing, benefit administration, and employee record keeping. This automation reduces manual effort and enhances operational efficiency, enabling HR professionals to devote more time to strategic activities that contribute to gaining organizational performance and competitive advantage. A book published by Thite (2018) provides insights into digital approaches, directions, and applications of e-HRM, which can be valuable for understanding the relationship between e-HRM technologies and organizational performance. E-HRM technology options have been linked to gains in organizational performance, including higher efficiency, decreased expenses, and increased employee productivity and satisfaction (Cascio & Monteaulegre, 2016). The hospitality industry has embraced e-HRM technologies as powerful tools for enhancing organizational performance. Previous studies (Hussain et al., 2017; Sajid et al., 2021) have shown that these practices effectively increase employee engagement and work satisfaction and consequently improve business outcomes. Despite its many advantages, the hospitality industry faces unique challenges in adopting e-HRM practices. Kim and Kim's (2018) research demonstrated that introducing new digital technologies can be difficult if employees are not on board, a challenge amplified for small businesses due to limited resources. This study seeks to determine how these obstacles may be overcome while taking full advantage of all the offers of E-HRM technologies.

**H1b:** E-HRM technologies have a positive and significant influence on organizational performance.

2.4. Relationship of Electronic Human Resources Management (E-HRM) technologies with Organizational Sustainability (OS) and Steady Growth in Profit

Researchers have revealed a powerful connection between e-HRM technologies and organizational sustainability that can be harnessed to drive success. Through cost savings, higher HR management efficiency, improved collaboration among employees, and better decision-making fuelled by reliable data, businesses are provided with an effective tool for achieving long-term development goals. Studies (Liang & Li, 2017; Ulrich & Dulebohn, 2015) have demonstrated how much the positive impact of implementing e-HRM technology solutions can reach within organizations. This is supported by a study by Parry & Tyson (2018), who discovered that e-HRM technologies might increase HR information quality and integrate HR strategies with business objectives, resulting in enhanced financial performance. Deb et al. (2021) found that e-HRM practices significantly affect organizational sustainability in the Indian hospitality industry. They propose that e-HRM systems can facilitate the implementation of sustainability strategies by providing real-time information regarding employee performance and environmental impact. An organization's sustainability is its ability to meet current needs without compromising future needs (Savitz, 2013). Organizational sustainability—economic, social, and environmental—is increasingly vital for long-term performance and profit. Steady Growth in Profit: Firms survive by maintaining a high profit margin. According to one study, consistently profitable companies can invest in new products, services, and technology. These companies can also attract and retain top talent (Ward, 2015). Profitable companies can better meet the needs of their shareholders, customers, and employees. E-HRM technologies have been touted as powerful tools for improving employee quality, engagement, and productivity. According to Kehoe & Wright (2013), it can lead to steady profit growth; Mone & London's (2018) research further supported this notion with evidence of its successful incorporation into companies' HR strategies. With E-HRM technologies, organizations can increase sustainability and profitability. Its cost-cutting abilities free up resources for improved financial decision-making, while its accuracy in HR data helps to ensure higher quality hires that are more productive and engaged, resulting in greater organizational performance (Ulrich & Dulebohn, 2015). E-systems automate HR processes, save money, increase productivity, and reduce greenhouse gas emissions. Eltayeb & Zailani (2013) found that such programs reduced Malaysian companies' carbon emissions, emphasizing the relevance of corporate responsibility. E-HRM technologies also improve employee management and development, which are crucial to an organization's sustainability. According to UAE research, e-HRM technologies improve hospitality training and talent management (Almarri et al., 2021). E-HRM technologies can help employees become more critical of an organization's sustainability. E-HRM systems can also increase
organizational sustainability. E-HRM allows one to increase efficiency, reduce costs and increase employee engagement and talent management, which are critical to organizational sustainability. E-HRM technologies are used in sustainable development strategies to increase efficiency and reduce waste. Therefore, this study shows the following:

\[ H_{1c}: \text{E-HRM positively and significantly influences organizational sustainability and the steady growth of profit.} \]

2.5. Organizational innovation (OI)

Schumpeter (1934) provided the first conceptual description of innovation as a determinant of economic progress. He recognized that novel ideas were crucial to an organization's growth and advancement. To date, most corporations have seen innovation as a top priority. Change is the only continuous phenomenon in contemporary business, highlighting innovation's importance (Christensen, 1997). Innovation can transform a corporation by responding to or preemptively influencing the external environment. Organizations must innovate to succeed. It affects a company's survival and competitiveness. Organizational innovation entails introducing novel concepts, goods, services, and procedures. Organizational innovation is a crucial driver of competitive advantage, as organizations capable of innovation are likely to succeed in dynamic and competitive environments. According to Damanpour (2014), innovation can improve financial performance, as innovative organizations are more likely to succeed in competitive environments. In addition, creation can give organizations a competitive advantage, as innovative products, services, and processes can set them apart from their rivals (Bettis & Hitt, 2015).

2.6. Relationship between Organizational Innovation and Organizational Sustainability

In today's competitive corporate world, innovation and sustainability are must-haves. E-HRM has made it simpler for businesses to integrate innovative ideas and sustainability into their HR practices. Recruiting, selecting, training, evaluating, compensating, and communicating are just some HRM procedures that can benefit from incorporating electronic tools (Bondarouk & Rul, 2019). E-HRM has been shown to improve operational effectiveness, reduce costs, and encourage the adoption of innovative and environmentally friendly business methods. Therefore, implementing e-HRM may have far-reaching consequences for the inventiveness and sustainability of businesses. Hence, electronic HR practices can increase an organization's potential for innovation and deploy sustainable practices that contribute to its long-term success and profitability. Sustainable and innovative business practices go hand in hand in the hospitality sector (Alqarni et al., 2023). It was found that innovation increases sustainability in the hospitality industry by encouraging businesses to implement new methods that lessen their negative environmental effects (Imran & Alam, 2018; Tanveer et al., 2024). In addition, research indicates that organizational innovation positively influences organizational sustainability. For instance, Zhang et al. (2018) discovered that organizational innovation positively influences environmental sustainability in the manufacturing industry. Similarly, a very recent study suggested by Choi et al. (2021) revealed that organizational innovation positively impacts sustainability in small and medium-sized service industry businesses. Therefore, it can be concluded that e-HRM practices can contribute to an organization's potential for innovation and the deployment of sustainable practices that contribute to its long-term success and profitability, particularly in the hospitality sector.

\[ H_{2c}: \text{Organizational innovation has a significant and positive influence on organizational sustainability.} \]

2.7. Organizational innovation mediates the relationship between e-HRM adoption and organizational sustainability

Organizational innovation involves generating and embracing fresh concepts, procedures, products, or services that advance environmental, social, and economic sustainability, as emphasized by (Guinot et al., 2022). E-HRM can foster innovation within organizations by improving HR processes and enabling efficient knowledge management. Consequently, this fortifies the organization's ability to devise and implement sustainable solutions, thereby contributing to organizational sustainability, as accentuated by (Martini et al., 2021). E-HRM contributes to nurturing an inventive atmosphere within organizations by providing collaborative platforms that facilitate the sharing of knowledge and the generation of ideas. This, in turn, fosters communication and interaction among employees, promoting the exchange of creative concepts and cultivating a culture that acknowledges and rewards organizational innovation, as stated by (Aliane et al., 2023). As highlighted by Imperatori (2017), integrating online platforms for idea generation, assessment, and implementation into e-HRM allows employees to easily submit their ideas, offer feedback on others’ ideas, and engage in initiatives driven by innovation. This systematic approach to idea management enables organizations to effectively capture and assess inventive ideas, ultimately leading to the implementation of measures promoting organizational sustainability. Based on these findings, the influence of e-HRM on
organizational innovation may have a positive effect on organizational sustainability. For example, it has been found that employee participation in decision-making moderates the association between e-HRM adoption and innovation in the Saudi Arabian hospitality industry. This indicates that organizational innovation may mediate between e-HRM adoption and organizational sustainability, as stated by Almutairi et al. (2020). Based on the literature review, the following hypotheses are proposed:

$H_8$: Organizational innovation mediates the relationship between e-HRM adoption and organizational sustainability.

2.8. Organizational Performance (OP)

Dess & Robinson Jr. (2012) argue that financial and nonfinancial measures can measure an organization's performance. Sales, profit, and ROI determine a company's success. However, nonfinancial factors such as customer satisfaction and employee creativity can also affect a company's performance. The management of financial and nonfinancial performance metrics determines an organization's success. Financial Measures of Organizational Performance: Among the financial measures of an organization's performance are revenue, profit, and return on investment. A study by (Chen et al., 2017) revealed that financial performance positively correlates with organizational performance, as organizations with higher revenues and profits are more likely to succeed. Moreover, return on investment is an essential metric for evaluating organizational performance, as it indicates how efficiently an organization uses its resources (Ittner et al., 2015). Nonfinancial Measures of Organizational Performance: Customer satisfaction, personnel satisfaction, and innovation are nonfinancial performance indicators. Homburg et al. (2017) say that consumer happiness drives organizational performance. Businesses that meet client needs are more likely to succeed. Since satisfied workers are more likely to be engaged and devoted to their jobs, worker satisfaction also affects an organization's performance (Choi & Lee, 2015). Innovation drives organizational performance. In dynamic and competitive environments, imaginative businesses are more likely to succeed (Damanpour, 2014).

2.9. Relationship between Organizational Performance and Organizational Sustainability

While adopting sustainability practices may not immediately result in improved financial performance, it has the potential to achieve superior social and environmental outcomes. These positive outcomes, in turn, contribute to enhanced financial performance (Shi & Tsai, 2020). Sustainability involves not only enhancing the well-being of all living entities but also establishing conducive business environments that are advantageous for businesses (Stombelli, 2020). Organizational sustainability is dependent on organizational performance. Financial performance measures such as revenue growth, profit margins, and return on investment (ROI) are frequently employed to evaluate organizational success (Hitt et al., 2016). However, a substantial correlation exists between nonfinancial metrics such as customer experience, staff engagement, environmental sustainability, and long-term organizational viability (Kianto et al., 2017). Studies have suggested that sustainable organizations can achieve steady profit growth while focusing on social and environmental responsibility (Bocken et al., 2015; Rey-Martí et al., 2019). Due to growing concern about the environmental impact of tourism and the depletion of natural resources, the hospitality industry is emphasizing organizational sustainability more. Kim et al. (2019) discovered that sustainable strategies favour organizational performance in the hospitality industry.

$H_9$: Organizational performance has a significant and positive influence on organizational sustainability.

2.10. Organizational performance mediates the relationship between E-HRM and organizational sustainability

E-HRM has advanced the streamlining of HR functions through the integration of technological tools for enhanced performance. The implementation of e-HRM is capable of fostering organizational efficiency, effectiveness, and financial capabilities. Consequently, this adoption of e-HRM can lead to an enhancement in organizational performance (Alrawashdeh et al., 2021; Khashman & Al-Ryalat, 2015). Multiple prior studies affirm the substantial positive influence of EHRM on organizational performance (Thathsara & Sutha, 2021; Masum et al., 2020; Al-Kasasbeh et al., 2016; Alrawashdeh et al., 2021). Organizational performance may mediate the complex relationship between e-HRM and long-term sustainability. Organizational success is typically measured in terms of financial metrics such as revenue growth, profit margin, and return on investment (ROI), as discussed by Hitt et al. (2016). Organizational sustainability is strongly linked to nonfinancial criteria of success, such as employee and customer satisfaction and environmental sustainability (Kianto et al., 2017). E-HRM technologies increase corporate sustainability by improving HR operations, cutting administrative costs, and enhancing employee engagement and satisfaction (Bakotic, 2017). However, organizational performance, including financial and nonfinancial elements, may affect e-HRM technology and organizational sustainability (Jiang et al., 2017). Organizations that perform well
financially and nonfinancially will be better prepared for long-term organizational sustainability. According to the literature review, the following hypotheses are proposed:

\( H_5: \) Organizational performance mediates the relationship between e-HRM and organizational sustainability.

Based on the theoretical framework and literature review, we developed a theoretical model represented in Figure 1 below. This model depicts various dimensions, including e-HRM technologies (ERS 1,2,3 for e-recruitment & selection, EVT 1,2,3 for electronic & virtual training, EPM 1,2,3 for e-performance management, ECB 1,2,3 for e-compensation & benefits, and HRISC 1,2,3 for human resources information system (HRIS) & e-communication); organizational performance (OFP 1, 2 for organizational financial performance, ONFP 1, 2, 3, 4 for organizational nonfinancial performance); organizational innovation (ORG.innov 1, 2, 3, 4); and organizational sustainability (ORGsus 1, 2, 3, 4).

![Figure 1. Theoretical model](image)

Sources: developed by the authors.

3. Methodology and research methods. For positivism, the current study employed a quantitative research methodology to evaluate the link between the latent variable (i.e., e-HRM) and the dependent variables (i.e., organizational innovation, organizational performance, and organizational sustainability). Data analysis and hypothesis testing were performed using partial least squares structural equation modelling (PLS-SEM), a popular statistical analysis method because it facilitates the investigation of intricate interrelationships among latent components (Hair Jr. et al. 2016). Additionally, the SPSS statistical software suite developed by IBM will be used for in-depth analyses such as correlation and regression on the collected data. The population of this study consists of Saudi Arabian hospitality industry employees. For data collection between January and February 2023, self-report questionnaires were utilized. The questionnaires were distributed in four major Saudi regions (central, eastern, western, and southern) to obtain a nationally representative sample. In addition, this study collected data using a questionnaire and a proportional random sampling technique.

A questionnaire is a standard means of collecting primary data. The questionnaire was thoroughly reviewed to determine if it was understandable to all respondents and if any modifications were necessary. The questionnaire contained 27 questions. A 5-point Likert scale (ranging from strongly disagree to strongly agree) was utilized to collect responses for each item. Section A of the survey questionnaire inquired about the
respondent's demographics, while section B comprised all questions regarding the independent variable of interest in this study. In addition, the survey questionnaire covered organizational performance (financial performance and nonfinancial performance) in Section C, organizational sustainability (steady profit growth) in Section D, and organizational innovation in Section E. In section A, we posed nine questions concerning the demographic profile. In part B, we asked 12 questions in nine subcategories of e-HRM practices (e-recruitment & selection, electronic & virtual training, e-performance management, e-compensation & benefit, and human resources information system (HRIS) & e-communication). These subcategories were measured using scale items from the study (Muqaddim & Hosain, 2021). In section C, we posed six questions under two subcategories of organizational performance (financial-nonfinancial performance), with the financial items and two nonfinancial items using the scale from (Miah, 2018) and the remaining nonfinancial items using a different scale. Lee & Choi (2003) described the remaining two factors. In section D, the researcher posed five questions measuring organizational sustainability (consistent profit growth) using scale items from (Muqaddim & Hosain 2021). In part E, we asked four organizational innovation (OI) questions for the organizational innovation scale. Four items from the study by Garcia-Morales et al. (2012) were adapted, and sample items included "In our workplace, learning opportunities are created through systems and procedures".

4. Results. The sample participants were distributed according to their demographic features, as shown in Table 1. The sample consists of 438 individuals employed in the hospitality industry, including accommodations, food and beverages, travel and tourism, conferences and events, entertainment, and other fields. The analysis yielded the following conclusions: most participants (86.5%) were Saudi, while 13.5% were not. The percentage of female participants (59.8%) in the sample was greater than that of male participants (40.2%). Age: The largest age group in the model is between 31 and 40 years (37.7%), followed by 21 to 30 years (31.3%) and 41 to 50 years (21.2%). The smallest age group is those over 50 years (4.6%). Experience: Most individuals (60.4%) had less than ten years of experience. Only 3.7% had more than 20 years of experience. The majority of participants (60.7%) held a bachelor's degree, followed by those with a high school diploma (16.9%) and a master's degree (13.7%). Only 2.3% of the participants possessed a Ph.D. The sample consisted of individuals from various degrees of positions within the hospitality business. Twenty-four percent are rank-and-file workers, 27.6% are supervisors, 18.5% are department/section leaders, and 7.5% are executives and higher-level managers.

Table 1. Distribution of Sample Members According to Demographic Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>%</th>
<th>Variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nationality</strong></td>
<td></td>
<td></td>
<td><strong>Hospitality Industry field</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi</td>
<td>379</td>
<td>86.50%</td>
<td>Accommodation</td>
<td>64</td>
<td>14.60%</td>
</tr>
<tr>
<td>Non-Saudi</td>
<td>59</td>
<td>13.50%</td>
<td>Food And Beverages</td>
<td>48</td>
<td>11.00%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td>Travel and Tourism Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>176</td>
<td>40.20%</td>
<td>Conference and Events</td>
<td>70</td>
<td>16.00%</td>
</tr>
<tr>
<td>Female</td>
<td>262</td>
<td>59.80%</td>
<td>Entertainment Other</td>
<td>42</td>
<td>9.60%</td>
</tr>
<tr>
<td>Less than 21 Years</td>
<td>23</td>
<td>5.30%</td>
<td>below 99 employees</td>
<td>154</td>
<td>35.20%</td>
</tr>
<tr>
<td>from 21–30 Years</td>
<td>137</td>
<td>31.30%</td>
<td>from 100 to 299 employees</td>
<td>132</td>
<td>30.10%</td>
</tr>
<tr>
<td>from 31–40 Years</td>
<td>165</td>
<td>37.70%</td>
<td>from 300 to 455 employees</td>
<td>141</td>
<td>32.20%</td>
</tr>
<tr>
<td>from 41–50 Years</td>
<td>93</td>
<td>21.20%</td>
<td>from 500 to more employees</td>
<td>88</td>
<td>20.10%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td>Trainee</td>
<td>77</td>
<td>17.60%</td>
</tr>
<tr>
<td>Above 50 Years</td>
<td>20</td>
<td>4.60%</td>
<td>Trainee</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Less than one year</td>
<td>34</td>
<td>7.80%</td>
<td>Novice</td>
<td>153</td>
<td>34.90%</td>
</tr>
<tr>
<td>from 1 – 5 Years</td>
<td>143</td>
<td>32.60%</td>
<td>Proficient</td>
<td>189</td>
<td>43.20%</td>
</tr>
<tr>
<td>from 6 – 10 Years</td>
<td>133</td>
<td>30.40%</td>
<td>Expert</td>
<td>96</td>
<td>21.90%</td>
</tr>
<tr>
<td>from 11 – 15 Years</td>
<td>79</td>
<td>18.00%</td>
<td>Rank and File</td>
<td>105</td>
<td>24.00%</td>
</tr>
<tr>
<td>from 16 – 20 Years</td>
<td>33</td>
<td>7.50%</td>
<td>Supervisory Level</td>
<td>121</td>
<td>27.60%</td>
</tr>
<tr>
<td>Above 20 Years</td>
<td>16</td>
<td>3.70%</td>
<td>Department/Section Head</td>
<td>81</td>
<td>18.50%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>10</td>
<td>2.30%</td>
<td>Executive and higher Management</td>
<td>33</td>
<td>7.50%</td>
</tr>
<tr>
<td>Masters</td>
<td>60</td>
<td>13.70%</td>
<td>Other</td>
<td>98</td>
<td>22.40%</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
<td>Level of position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>266</td>
<td>60.70%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>74</td>
<td>16.90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>28</td>
<td>6.40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Qualification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: developed by the authors.
The sample comprises participants from various sectors within the hotel business, with the majority (35.2%) working in the "other" field. Conferences and events (16%) are the second-largest fields. Most participants (62.3%) worked for firms with fewer than 300 workers. Knowledge of e-HRM: The sample consists of people with varying degrees of understanding of e-HRM. A total of 43.2% of the participants were skilled with e-HRM, and 21.9% were specialists. None of the participants described themselves as trainees, whereas 34.9% were novices. Understanding the sample’s makeup and generating valid results from any research or analysis requires this form of analysis. Demographic factors, including age, gender, and education, might influence people’s behaviour, attitudes, and beliefs, which may be related to research variables (Babbie, 2016). Therefore, sample demographics are crucial when interpreting research results. This analysis revealed that most of the sample participants were Saudi citizens, which is consistent with the local labor dominating the hospitality industry in Saudi Arabia (Adam, 2018). The sample’s significant female representation reflects women’s growing importance in the Saudi workforce (Kleiner & Wingrove, 2020). Most of the sample participants had less than ten years of experience, indicating a young hospitality workforce. This finding supports prior research on the hospitality industry's high turnover and low retention (Boella & Goss-Turner, 2013). In addition, many bachelor’s degree holders show the importance of education in the hospitality business, especially management (O’Fallon & Rutherford, 2011). Prior hospitality industry hierarchy studies show that most participants are middle managers (Lashley & Rowson, 2011). Most participants were in the "other" category, reflecting the hospitality industry's diversity. This matches the hospitality industry's many employment roles and enterprises (Brotherton, 2016). Table 1 provides crucial demographic information about the hospitality sample participants. These parameters help researchers comprehend the sample composition and derive more accurate conclusions from sample analyses.

This study revealed a definite link between e-HRM and major aspects of organizational performance. The data presented in Table 2 show positive associations between these variables, with the means and standard deviations ranging from 1.135 to 4.273 and 0.3418 to 1.4908, respectively, indicating that it is worth exploring further for potential improvements within an organization's framework.

### Table 2. Descriptive Statistics and Bivariate Pearson Correlations

<table>
<thead>
<tr>
<th>Demographic Details</th>
<th>Frequency</th>
<th>Descriptive</th>
<th>Bivariate Pearson Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Mean</td>
</tr>
<tr>
<td>Gender</td>
<td>176</td>
<td>262</td>
<td>1.598</td>
</tr>
<tr>
<td>Nationality</td>
<td>379</td>
<td>59</td>
<td>1.135</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td>2.886</td>
</tr>
<tr>
<td>Working Experience</td>
<td></td>
<td></td>
<td>2.922</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td>3.114</td>
</tr>
<tr>
<td>Position Level</td>
<td></td>
<td></td>
<td>2.767</td>
</tr>
<tr>
<td>Hospitality Industry Field</td>
<td></td>
<td></td>
<td>3.653</td>
</tr>
<tr>
<td>Organization Staff Size</td>
<td></td>
<td></td>
<td>2.251</td>
</tr>
<tr>
<td>Knowledge about E-HRM</td>
<td></td>
<td></td>
<td>1.918</td>
</tr>
<tr>
<td>Electronic HRM Technologies (E-HRM)</td>
<td></td>
<td></td>
<td>4.209</td>
</tr>
<tr>
<td>Organization Performance (OP)</td>
<td>4.161</td>
<td>0.5978</td>
<td>0.405 **</td>
</tr>
<tr>
<td>Organization Innovation (OI)</td>
<td>4.216</td>
<td>0.6228</td>
<td>0.440 **</td>
</tr>
<tr>
<td>Organizational Sustainability (CS)</td>
<td>4.273</td>
<td>0.5228</td>
<td>0.432 **</td>
</tr>
</tbody>
</table>

Note: **-The correlation is significant at the 0.01 level (2-tailed); *- Bivariate Pearson correlations and their relationships.

Sources: developed by the authors.

Additionally, we discovered a significant correlation among organizational performance growth, organizational innovation development, and organizational sustainability achievement, suggesting important implications for each factor being dependent on one another to reach higher levels of success overall. Using bivariate Pearson correlation analysis and descriptive statistics, organizations can gain valuable insights into the associations between variables to ensure that their e-HRM processes are optimized for improved organizational performance, increased innovation potential, and sustainability. This comprehensive study utilized robust statistical software SmartPLS 3.3.5 to evaluate and test both measuring and structural models through hypothesis tests to assess the reliability, convergent validity, and discriminant validity of the indicators, as shown in Table 3. The results indicated that items with factor loadings above 0.7 were deemed suitable for further analysis, while Cronbach’s alpha ratings yielded numbers exceeding the necessary threshold of 0.70 (Hair et al., 2019; Hair Jr., 2021). The results of the AVE for all the constructions are shown in Table 3, where all of them are over the recommended value of 0.50 (Hair Jr. et al., 2021).
Table 3. Assessment of Reflective Measurement Models

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Type</th>
<th>Loadings</th>
<th>a</th>
<th>rho-A</th>
<th>CR</th>
<th>AVE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic E-HRM Technologies</td>
<td>ERS1, ERS2, ERS3</td>
<td>Reflective</td>
<td>0.517</td>
<td>0.843</td>
<td>0.845</td>
<td>0.871</td>
<td>0.59</td>
<td>1.384</td>
</tr>
<tr>
<td></td>
<td>EVT1, EVT2, EVT3</td>
<td></td>
<td>0.483</td>
<td>0.511</td>
<td>0.541</td>
<td>0.540</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EPM1, EPM2, EPM3</td>
<td></td>
<td>0.540</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>ONFP1, ONFP2, ONFP3</td>
<td>Reflective</td>
<td>0.624</td>
<td>0.730</td>
<td>0.747</td>
<td>0.8</td>
<td>0.53</td>
<td>1.292</td>
</tr>
<tr>
<td></td>
<td>ONFP4</td>
<td></td>
<td>0.546</td>
<td>0.794</td>
<td>0.539</td>
<td>0.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Innovation</td>
<td>ORG.innov1, ORG.innov2, ORG.innov3, ORG.innov4</td>
<td>Reflective</td>
<td>0.785</td>
<td>0.754</td>
<td>0.755</td>
<td>0.844</td>
<td>0.58</td>
<td>1.358</td>
</tr>
<tr>
<td></td>
<td>ORG.innov5</td>
<td></td>
<td>0.716</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Sustainability</td>
<td>ORGsus1, ORGsus2, ORGsus3, ORGsus4, ORGsus5</td>
<td>Reflective</td>
<td>0.740</td>
<td>0.740</td>
<td>0.740</td>
<td>0.8</td>
<td>0.58</td>
<td>1.507</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.629</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a = Cronbach’s alpha; CR = composite reliability; AVE = average variance extracted; VIF = variance inflation factor; BCCI = bias-corrected confidence interval.

Sources: developed by the authors.

Figure 2 depicts the outcomes of the assessed measurement model.

Figure 2. Results of the Assessment Model
Sources: developed by the authors.
The Fornell-Larcker and Hetro-Trait Mono-Trait (HTMT) criteria are two popular metrics for discerning the validity of items. Table 4 reveals that when applied to the Electronic e-HRM, Organizational Innovation (OI), Performance (OP), and Sustainability constructs (Henseler et al., 2015), both methods indicated distinct discriminant validities – surpassing any correlations between the four concepts (Fornell & Larcker, 1981). This demonstrates sufficient justification for adequately distinguishing one construct from another with confidence. In addition, the moderate to substantial correlations between constructs indicate that they are connected but not redundant. The HTMT criterion results demonstrate that each construct possesses adequate discriminant validity, as none share a variance exceeding 0.9, meaning that there is no notable overlap between any two concepts (Henseler et al., 2015). This study's findings provide evidence for the validity of the measurements utilized to examine the links between electronic e-HRM, OI, OP, and OS. These findings encourage academics and practitioners interested in incorporating these dimensions into their work, and they can inform future studies in this field.

Table 4. Discriminant validity using the Fornell–Larcker criterion and HTMT criterion

<table>
<thead>
<tr>
<th>E-HRM</th>
<th>OI</th>
<th>OP</th>
<th>OS</th>
<th>E-HRM</th>
<th>OI</th>
<th>OP</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.765</td>
<td>0.759</td>
<td>0.729</td>
<td>0.76</td>
<td>0.560</td>
<td>0.641</td>
<td>0.68</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Note: The bold numbers on the diagonal in the Fornell–Larcker section are the square roots of the AVE of each construct, and the other numbers are the correlations between the constructs; E-HRM denotes E-Human Resource Management Technology; OI denotes Organizational Innovation; OP denotes Organizational Performance; and OC denotes Organizational Sustainability.

Sources: developed by the authors.

Examining the structural model tries to determine how different constructs are related (Hair et al., 2019). The test was performed on the hypothesized model using SmartPLS (version 3.3.5) and the PLS-SEM algorithm to generate the path coefficients in the figure below. Table 5 displays the research findings obtained using the SmartPLS method, a valuable tool for structural equation modelling.

Table 5. Model Evaluation

<table>
<thead>
<tr>
<th>Variables</th>
<th>SRMR</th>
<th>NFI</th>
<th>SSO</th>
<th>SSE</th>
<th>Q² Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-HRM</td>
<td>0.074</td>
<td>0.911</td>
<td>321.198</td>
<td>249.316</td>
<td>0.223</td>
</tr>
<tr>
<td>OI</td>
<td>2628.000</td>
<td>2341.753</td>
<td>0.109</td>
<td>Small</td>
<td></td>
</tr>
<tr>
<td>OP</td>
<td>146.587</td>
<td>82.276</td>
<td>0.439</td>
<td>Large</td>
<td></td>
</tr>
</tbody>
</table>

Note: SRMR (Standardized Root Mean Square Residual); NFI (Normed Fit Index); SSO (Sum of Squares of Observations); SSE (Sum of Squares of Errors).

Sources: developed by the authors.

This study evaluated the correlations between E-HRM technology and OI, OP, and OS. The SRMR, a commonly employed model fit index, is the first value reported in the table. In this investigation, the SRMR value was 0.074, which indicates that the observed data and the model fit well. The second metric presented is the normalized fit index (NFI), which evaluates the model's fit. An NFI score of 0.911 indicated that the model fit the data well. The sum of squares of observations (SSO) and sum of squares of errors (SSE) are the third and fourth measures provided in the table, respectively (SSE). These metrics evaluate how well the model describes the observed data. The SSO values for OI, OP, and OS in this investigation were 321.198, 2628.000, and 146.587, respectively. The corresponding SSE values were (249.316), (2341.753), and (82.276). These findings indicate that the model adequately explains a substantial part of the variance in the outcome variables.

The Q2 and Q2 Effect values are presented in the table's final column. The Q2 measure evaluates the model's predictive validity, whereas the Q2 effect quantifies the effect size of each endogenous construct on its corresponding exogenous construct. In this study, the Q2 values for OI, OP, and OS were not published, but the Q2 effect values were 0.223 (medium effect size), 0.109 (small effect size), and 0.439 (large effect size) for OI, OP, and OS, respectively.
This study utilized the blindfolding technique to evaluate the model's predictive validity. This method involves randomly dividing the data into a training set and a testing set and then assessing the model's predictive ability using the testing set. Finally, the use of blinding ensures that the results are not influenced by the sample utilized in the study and provides a more accurate evaluation of the predictive potential of the model. This study indicates that electronic e-HRM technology benefits organizational innovation (OI), organizational performance (OP), and organizational sustainability (OS). The findings further emphasize the significance of employing the blindfolding method in SmartPLS analyses to ensure the validity of the results.

Table 6 shows that the purpose of this study was to examine the connection between electronic human resource management (E-HRM) technology and organizational innovation (OI), organizational performance (OP), and organizational sustainability (OS). The hypotheses were tested using an unspecified sample size, and the results are presented in the table above.

Table 6. Results of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direct/Indirect Effect</th>
<th>Sample Mean</th>
<th>STDEV</th>
<th>T Value</th>
<th>P values</th>
<th>Bias</th>
<th>Bias Corrected 5.00%</th>
<th>95.00%</th>
<th>Hypothesis Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>E-HRM -&gt; OI</td>
<td>0.464</td>
<td>0.060</td>
<td>7.676</td>
<td>0.000</td>
<td>0.004</td>
<td>0.329</td>
<td>0.572</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>E-HRM -&gt; OP</td>
<td>0.520</td>
<td>0.047</td>
<td>11.027</td>
<td>0.000</td>
<td>0.006</td>
<td>0.417</td>
<td>0.590</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c</td>
<td>E-HRM -&gt; OS</td>
<td>0.311</td>
<td>0.072</td>
<td>4.290</td>
<td>0.000</td>
<td>0.003</td>
<td>0.513</td>
<td>0.433</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>OI -&gt; OS</td>
<td>0.180</td>
<td>0.082</td>
<td>2.173</td>
<td>0.030</td>
<td>0.001</td>
<td>0.022</td>
<td>0.341</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>OP -&gt; OS</td>
<td>0.161</td>
<td>0.062</td>
<td>2.549</td>
<td>0.011</td>
<td>0.005</td>
<td>0.033</td>
<td>0.273</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>E-HRM -&gt; OI -&gt; OS</td>
<td>0.082</td>
<td>0.037</td>
<td>2.237</td>
<td>0.026</td>
<td>0.000</td>
<td>0.012</td>
<td>0.153</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>E-HRM -&gt; OP -&gt; OS</td>
<td>0.083</td>
<td>0.031</td>
<td>2.600</td>
<td>0.010</td>
<td>0.002</td>
<td>0.021</td>
<td>0.145</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Sources: developed by the authors.

The first hypothesis (H1a) predicted a direct effect of the electronic e-HRM technique on OI. The results show that β is 0.464, and the standard deviation is 0.060. The p value was less than 0.001, and the t value was 7.676. The bias was 0.004, and the bias-corrected value was 0.329, indicating that H1a was strongly supported, with a 95% confidence interval (CI) ranging from 0.572 to 0.196.

The second hypothesis (H1b) predicted a direct effect of e-HRM technologies on OP. The results reveal a β of 0.520, with an STDEV of 0.047. The p value was less than 0.001, and the t value was 11.027. The bias was 0.006, and the bias-corrected value was 0.417, indicating that hypothesis H1b was strongly supported. The 95% CI was between 0.590 and 0.349.

The third hypothesis (H1c) predicted that e-HRM technologies would directly affect OS. The results indicate a β of 0.31 and a standard deviation of 0.07. The p value was less than 0.001, and the t value was 4.290. The bias was 0.003, and the bias-corrected value was 0.513, indicating support for this hypothesis (H1c). The 95% CI ranged between 0.43 and 0.19.

The fourth hypothesis (H2) predicted a direct effect of OI on OS. The results show a β of 0.180 and an STDEV of 0.082. t = 2.172; p = 0.030. The bias was 0.001, and the bias-corrected value was 0.022, indicating that H2 was supported. The 95% CI was between 0.341 and 0.020.

The fifth hypothesis (H3) predicted that OP would directly affect OS. The results indicate a β of 0.16 and a standard deviation of 0.06. The t value was 2.549, and the p value was 0.011. The bias was 0.005, and the bias-corrected value was 0.033, which indicates that H3 was supported. The 95% confidence intervals ranged from 0.273 to 0.004.

The sixth hypothesis (H4) predicted that E-HRM technologies would indirectly affect OS via OI. The results indicate a β of 0.082 and a standard deviation of 0.037. The t value was 2.237, and the p value was 0.026. The bias was 0.000, and the bias-corrected tendency was 0.012, indicating that hypothesis H4 was supported. The 95% CI was between 0.153 and 0.011.

The seventh hypothesis (H5) predicted an indirect effect of E-HRM technologies on OS through OP. The outcomes indicate a β of 0.083 and a standard deviation of 0.031. The p value was 0.010, while the t value was 2.600. The bias was measured at 0.002.

E-HRM technologies positively affect organizations' innovation, performance, and sustainability. Implementing this technology was associated with more efficient operations, improved productivity, and increased social exchange between employees and employers. According to previous research (Nishant et al., 2019; Liang et al., 2020), these advantages led to greater profitability for businesses while reducing their...
environmental impact through decreased resource consumption and waste production. E-HRM technologies have the potential to reshape organizational outcomes and increase job satisfaction. Tailored training, autonomy in decision-making, improved communication channels, and feedback mechanisms are necessary components of a successful system, as evidenced by previous research (Nishant et al., 2019; Liang et al., 2020). These findings suggest that increasing electronic HR management strategies could improve organizational performance. The study also revealed that organizational innovation (H2) and organizational performance (H3) significantly influence organizational sustainability. This result is consistent with previous research indicating that innovations and performance are essential for sustainable organizations (e.g., Adebanjo & Abbas, 2019; Naranjo-Valencia et al., 2018).

In addition, the study revealed that E-HRM had a significant indirect impact on organizational sustainability via organizational innovation (H4) and organizational performance (H5).

5. Discussion. The current study investigated the relationship between e-HRM technologies and organizational outcomes, such as organizational innovation, organizational performance, and organizational sustainability, and found that e-HRM technologies had a significant positive effect on all three products in an unspecified sample. These findings have important significance for the hospitality industry since they are consistent with previous studies showing the favourable influence of e-HRM technologies on organizational outcomes (Liang, et al., 2020; Nishant et al., 2019).

Hospitality is a service-oriented industry that requires high levels of customer service, flexibility, and adaptability to meet customers’ fluctuating needs. Utilizing E-HRM technologies in this industry can result in numerous advantages, including improved communication, efficiency, and employee engagement (Kim et al., 2020). The findings of this study indicate that e-HRM technologies, such as organizational innovations, organizational performance, and organizational sustainability, can also positively impact organizational outcomes in the hospitality industry. Specifically, the finding that E-HRM technologies have a significant positive effect on organizational sustainability has essential implications for the hospitality industry, as sustainability is becoming an increasingly important issue for businesses in this industry (Bakhtiar et al., 2021). In addition, e-HRM technologies can assist hospitality organizations in reducing their environmental impact, enhancing their social responsibility, and boosting their economic sustainability (Gursoy et al., 2021).

In addition, notably, e-HRM technologies indirectly impact organizational sustainability via organizational innovations and organizational performance. This finding suggests that the impact of e-HRM technologies has both direct and indirect effects on organizational sustainability in the hospitality industry. For example, to improve organizational results, such as organizational innovation, organizational performance, and organizational sustainability, organizations in the hospitality industry need to consider implementing E-HRM technology practices. Considering this debate, E-HRM technologies can be connected to the resource-based view (RBV) by stressing its worth and uniqueness as a resource that can aid in developing a company’s competitive advantage. Positive effects of e-HRM technologies on outcomes, including organizational innovation, performance, and sustainability, were found in this study. Such results can boost an organization’s viability by increasing its resources and skills.

Performance improvement theory (PIT) also shows how e-HRM technologies may effectively address business performance gaps. As a result, organizations in the hotel industry can benefit from e-HRM technologies by enhancing their communication, employee engagement, and productivity. This research supports innovation diffusion theory (IDT) by showing how e-HRM technologies might improve business results. According to the findings, businesses in the hospitality sector can boost their performance, innovation, and sustainability thanks to the perceived utility, ease of use, and social influence of e-HRM technologies. This topic ties E-HRM technologies to the theory of organizational performance by illustrating the positive effects of E-HRM on outcomes such as organizational innovation, performance, and sustainability. The results of this study indicate that businesses in the hotel sector can boost their productivity, employee morale, and environmental impact by adopting e-HRM practices.

The demographic analysis of the sample revealed a high percentage of Saudi participants (86.5%), which reflects the dominance of the local labor force in the Saudi Arabian hospitality industry, consistent with the literature (Adam, 2018). The overrepresentation of female participants (59.8%) highlights the growing role of women in the Saudi workforce, which is consistent with societal changes (Kleiner & Wingrove, 2020). Furthermore, most participants with less than ten years of experience reflect the youthfulness of the workforce, which is in line with the high turnover and low retention rates observed in the hospitality sector (Boella & Goss-Turner, 2013).
The significant presence of Bachelor's degree holders (60.7%) accentuated the importance of education in the industry, particularly in management roles (O'Fallon & Rutherford, 2011). Additionally, the diverse positions within the hospitality business, with most participants in the "other" category, reflect the multifaceted nature of the industry, which has various employment roles and enterprises (Brotherton, 2016). The sample's hierarchy distribution demonstrated that most participants held middle management positions, mirroring the organizational structure of the hospitality business. Understanding the industry's hierarchy can assist companies in designing job roles and duties that match their organizational objectives, guaranteeing a clear and compelling division of labor and responsibilities. In addition, it is vital to analyse the demographic characteristics of the sample participants to understand the Saudi Arabian hospitality workforce. In addition, the findings provide valuable insights into the features of the industry's workforce, which can inform HR strategies and decision-making, thereby boosting employee satisfaction, productivity, and organizational success.

Impressively, this study demonstrates that E-HRM technologies have the potential to improve organizational outcomes, such as organizational innovation, organizational performance, and organizational sustainability. These findings are in line with those of (Almashyakh, 2022; Bondarouk et al., 2016) and have significant ramifications for companies seeking to improve performance and assure sustainability by using the potential of digital technologies. By adopting e-HRM technologies, businesses may unleash an entirely new level of efficiency and effectiveness, propelling them to unparalleled success and expansion.

6. Conclusions With an increasing number of female employees, Saudi citizens dominate the hospitality industry's workforce. The average age range falls between 21 and 40—a comparatively younger demographic that suggests high turnover rates in the sector. An emphasis on higher education is evident, as most participants are equipped with bachelor's degrees or above; middle management is also their primary job designation. These findings may inform HR strategies by providing key information about relevant demographics for effective decision-making. E-HRM technologies have the potential to revolutionize businesses of all sizes, leading them toward sustainable and successful growth. This study revealed various organizational benefits that could be unlocked by embracing this technology—from improved performance to increased innovation and sustainability. Organizations ready for success must look at digital transformation.

The empirical findings of this study also have wider economic ramifications for Saudi Arabia since they emphasize the role that innovation and human resource management play as catalysts for long-term, sustainable growth. These findings are in line with Vision 2030's goals, which include lowering the country's reliance on oil earnings and transforming it into a diverse, knowledge-based economy. The research's empirical findings contribute to our understanding of the connections among e-HRM, innovation, performance, and sustainability. Furthermore, they highlight the significance of these links for Saudi Arabia's Vision 2030, which outlines the country's larger economic development objectives. The country can effectively negotiate the challenges of a dynamic global landscape and establish itself as a center for innovation and sustainable growth by acknowledging the critical role that HR management and innovation play in promoting a sustainable economy. Pursuing strategic policies, investments, and partnerships is vital to guarantee the sustained prosperity of these endeavors inside the Saudi Arabian hospitality sector and beyond. Electronic HRM technologies positively influence organizational innovation and performance. This implies that investing in electronic HR tools can stimulate innovation, improve performance, and contribute to economic growth. Organizational innovation plays a pivotal role in enhancing sustainability, which is crucial for long-term growth and economic diversification. The association between the adoption of e-HRM technologies and organizational sustainability is mediated by organizational innovation and performance. This emphasizes how these elements function as a bridge to help achieve sustainability objectives. To promote innovation, enhance performance, and encourage sustainability, policymakers should aggressively encourage the hotel sector to use e-HRM technologies. Policymakers can play a decisive role in encouraging organizations to embrace electronic HRM technologies through incentives, subsidies, or training programs. Such policies can contribute to industry competitiveness (Shi & Wang, 2019). The sector can further align with Vision 2030's goals by promoting an innovative culture, providing incentives for sustainable efforts, and regulating HR practices. Finally, using e-HRM can boost the hotel sector's competitiveness, productivity, and job creation, all of which will promote economic expansion. The hotel industry can boost tourism revenue and foreign direct investment by attracting international travelers through sustainable and innovative practices.

This study has provided invaluable insights into how electronic HRM technologies can promote organizational sustainability, allowing us to develop more sophisticated theoretical models and frameworks (Shi & Wang, 2019; Ancillai et al., 2023). Additionally, it underscores the importance of understanding
performance and innovation as key mediators in this connection—a perspective that could help refine existing theories surrounding sustainable business practices (Marler & Boudreau, 2016; Ancillai et al., 2023). Organizations in the hospitality industry can benefit significantly from electronic HRM technologies, as highlighted by this research (Boella & Goss-Turner, 2013). Adopting these tech-driven strategies can aid businesses in reaching their long-term objectives and staying sustainable over time. This study also confirms that organizational performance and innovation are critical components of leveraging technology for sustainability; thus, organizations should ensure that they have a robust strategy focused on cultivating success while inspiring creativity through innovative thinking that drastically optimizes organizational sustainability in the hospitality sector. This paper explores how electronic HRM technologies are revolutionizing businesses, providing invaluable insights to help make practical changes for success in HRM scholarship.

The practical implications of this research substantially impact the Saudi hospitality industry, decision-makers, and managerial positions (Kleiner & Wingrove, 2020; Brotherton, 2016). According to this study, using electronic HRM technologies can increase organizational sustainability (Shi & Wang, 2019). In addition, firms in Saudi Arabia's hospitality industry can benefit from adopting a more strategic and integrated approach to e-HRM technologies, which includes aligning HR strategies with business objectives and integrating e-HRM technology practices with larger organizational projects. Firms should also consider investing in training and development programs to ensure that staff have the skills and knowledge to utilize E-HRM technology products and technologies efficiently. The study also emphasized sustainability related to organizational innovation and organizational performance (Marler & Boudreau, 2016; Ancillai et al., 2023). Based on these findings, Saudi hospitality organizations can enhance their organizational sustainability by implementing e-HRM technologies and nurturing innovation and performance within their organizations (O'Fallon & Rutherford, 2011). The study’s findings offer insights that can assist policymakers in promoting sustainable business practices and the integration of electronic HRM technologies. HR professionals can utilize research outcomes to develop HRM strategies aligned with sustainability goals. Additionally, this study highlights the impact of e-HRM technologies on sustainability within the Saudi hospitality industry by examining their mediating effects on organizational performance and innovation. These findings are valuable for researchers, organizations, policymakers, and HR professionals and provide insights for the creation of comprehensive sustainability plans across the industry.

The limitations of the suggested future research include potential challenges in obtaining accurate and representative data due to cultural sensitivities, as well as the dynamic nature of the Saudi Arabian hospitality industry. First, the study did not account for any moderating variables, such as organizational culture or leadership style, which may influence the relationship between E-HRM technologies and organizational results in the Saudi Arabian hotel industry. Second, research efforts may encounter resistance from organizations or individuals unwilling to disclose sensitive information about their E-HRM technology practices or cultural challenges. The generalizability of the findings may be constrained by the specific context of Saudi Arabia, limiting the broader applicability of the insights. Despite the limitations of this study, it offers valuable insights into the potential benefits of e-HRM technologies for organizational results in the hospitality industry. Future research should prioritize in-depth studies on the cultural dimensions influencing the implementation and effectiveness of e-HRM technologies in the Saudi Arabian hospitality industry. Comparative analyses with other industries or regions could reveal transferable best practices. Longitudinal research tracking the evolution of e-HRM technologies in the Saudi context would capture its dynamic nature. Exploring factors such as cultural adaptability and local workforce dynamics will enhance the applicability of findings in diverse settings.

**Author Contributions:** conceptualization, M. P and A. A; data curation, M. P and A. A; formal analysis, M. P; investigation, A. A; methodology, M. P; project administration, M. P; supervision, M. P; validation, M. P; visualization, M. P; writing – original draft, A. A; writing – review & editing, M. P and A. A

**Conflicts of Interest:** The authors declare no conflicts of interest.

**Data Availability Statement:** The raw data supporting the conclusion of this article will be available upon request to the corresponding author.

**Informed Consent Statement:** Informed verbal consent to participate was obtained from all participants in the study. A letter that explained the study’s purpose and promised respondents that their answers would be anonymous and voluntary to ensure fairness in the responses accompanying the survey.
References
2. Adam, M. (2018). The role of human resource management (HRM) for the implementation of sustainable product-service systems (PSS)—an analysis of fashion retailers. Sustainability, 10(7), 2518. [Google Scholar] [CrossRef]


Гостинність 2.0: роль електронного управління людськими ресурсами (E-HRM) в інноваціях та досягненнях цілей сталого розвитку

Мусррат Парвін, факультет економіки та адміністрування, кафедра управління людськими ресурсами, Університет Короля Абдулазіза, Саудівська Аравія

Афнан Абдулазіз Назель Альраддаді, факультет економіки та адміністрування, кафедра управління людськими ресурсами, Університет Короля Абдулазіза, Саудівська Аравія

Метою статті є вивчення впливу технологій електронного управління людськими ресурсами (E-HRM) на сталій розвиток організації, її продуктивність та інноваційність в контексті змін теорії гостинності в Саудівській Аравії. Використовуючи інструментарій кількісної методології, це дослідження оцінює
взаємозв'язки між е-HRM і залежними змінними, а саме: організаційною інновацією, продуктивністю організації та сталим розвитком організації. Авторами визначено, що план розвитку Саудівської Аравії «Візія 2030» передбачає диверсифікацію економіки, зменшення залежності від нафти та сприяння сталому розвитку – цілі, які тісно пов’язані з викликами та можливостями у сфері гостинності. У статті використано програмне забезпечення SPSS 25 і SmartPLS 3.3.5 для структурного моделювання. Вихідну базу дослідження сформовано з результатів опитування 438 працівників індустрії гостинності Саудівської Аравії. Для перевірки сформованих гіпотез дослідження використано кореляційний аналіз та структурне моделювання. Індустрія гостинності Саудівської Аравії стратегічно вибрана за її ключову роль у створенні робочих місць, економічному процвітанні та формуванні іміджу країни. Емпіричні результати дослідження підтвердили позитивний і статистично значущий вплив технологій е-HRM на організаційну інноваційність, її продуктивність та сталий розвиток. Результати оцінювання моделі (SRMR 0.074 та показником NFI 0.911) підкреслюють її надійність і валідність. Це дослідження не тільки емпірично підтверджує, але й теоретично обґрунтовує ключову роль технологій е-HRM у формуванні організаційних результатів. Враховуючи взаємовпливи між концептами продуктивність організації та її інноваційність, це дослідження робить значний внесок у розуміння того, як технології е-HRM можуть бути каталізатором сталого розвитку організації в контексті індустрії гостинності Саудівської Аравії. Отримані результати надають практичні інсайти для політиків, професіоналів індустрії гостинності та зацікавлених сторін, узгоджуючись з загальними цілями план розвитку Саудівської Аравії «Візія 2030» щодо сприяння сталому розвитку країни.

Ключові слова: технології електронного управління людськими ресурсами (E-HRM); управління людськими ресурсами; показники продуктивності; сталий розвиток.