European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

The Effect Of E-Human Resources Management On Organizational Performance From Public Sectors' Perspectives

Wondimu Tadesse Dawo
PhD Scholar, Faculty of Management Studies, Parul University,Waghodia, Vadodara, Gujarat, 391760,India

Dr.Paidipati Gopala Krishna Murthy
Professor, Faculty of Management Studies, Parul University,Waghodia, Vadodara, Gujarat, 391760,India

Corresponding Email:wondiyee12@gmail.com

Abstract
Effective human resources management (HRM) plays a vital role in shaping organizational performance and success. Traditionally, HRM practices have been predominantly paper-based, time-consuming, and prone to errors. However, the advent of e-HRM, which leverages digital technologies and online platforms, has revolutionized HRM processes, offering numerous advantages to organizations. This study investigated the effect of electronic human resource management (e-HRM) on organizational performance. Both descriptive and explanatory approaches, utilizing a quantitative research methodology were employed. The sample selection was conducted using a simple random sampling technique. The data were analyzed using descriptive and inferential statistical tools. Descriptive statistics, correlation, and multiple regression analysis were performed to test the hypothesized relationships between the independent and dependent variables. The regression results shows that all the E-HRM dimensions (E-Recruitment and Selection, E-Training, E-Performance Appraisal, and E-Compensation System) have a positive and statistically significant effect on Organizational Performance in the public sector context. The strongest effects are observed for E- Performance Appraisal and E-Compensation and Rewards, suggesting that these E-HRM practices play a pivotal role in improving organizational performance. To address these findings, the public sectors should focus on improving e-recruitment processes by utilizing objective algorithms and paperless approaches. Furthermore, it is recommended to prioritize the implementation of e-training programs supported by digital technology, adopt online pay practices and automate compensation systems, and leverage digital technology in performance appraisal processes.

Keywords: Public Sector, *e-Human Resources Management, e-Recruitment & Selection, e-Training,e-Performance Appraisal, And e- Compensation*

Introduction
In the era of globalization and rapid advancements in information and communication technology, the world has undergone significant transformation. This evolution has made the global landscape increasingly complex, dynamic, and unpredictable. As a result, organizations find themselves in fierce competition, driven by the soaring expectations of customers who demand high performance, quality, and cost-effectiveness (AlHamad et al., 2022). To gain an edge over their competitors, organizations are compelled to adopt innovative strategies. This push for innovation is further fueled by the continuous progress in technology use, computer applications, and

communication sciences. Additionally, there has been a substantial increase in investment in information systems, triggering a sweeping digital revolution across various business functions (Vrontis et al., 2022). Amidst this evolving landscape, the role of human resources has witnessed a profound digital transformation. In this new digital era, digitalization of human resources plays a crucial role in enabling organizations to efficiently achieve their objectives (Nyathi & Kekwaletswe, 2023).

E-HRM systems provide efficient mechanisms for collecting, storing, updating, and accessing employee data related to their knowledge, skills, and competencies (De Alwis, Andrlic, & Sostar, 2022). By leveraging these systems, organizations can expand their candidate pool and improve their recruitment processes, resulting in reduced costs and time. Moreover, the implementation of e-training and e-learning HR systems plays a crucial role in employee training and development, offering flexible and independent learning opportunities to enhance efficiency.The integration of technology in performance management is aimed at enhancing both individual and organizational performance by equipping employees with the necessary knowledge, techniques, and support systems (Zhou, Cheng, Zou, & Liu, 2022). Through computer-based career guidance systems, employees can identify their development priorities and compare their skills with the requirements of current and future positions, facilitating career growth (Al- Harazneh & Sila, 2021). Additionally, e-compensation tools streamline administrative tasks by providing real-time data and supporting wage equality maintenance (Rathee & Bhuntel, 2021). The implementation of e-occupational safety and health systems enables managers to stay updated on accident prevention activities, fostering risk-aware planning and personalized information sharing with employees (Almashyakhi, 2022).

The purpose of this study is to examine the effect of e-HRM on organizational performance of public sectors, focusing on Kolfe Keraniyo Sub City in Addis Ababa, Ethiopia. By investigating this context, the study aims to shed light on how the adoption of e-HRM can contribute to enhancing overall organizational performance.

1. Problem Statement

In the past two decades, the advent of information and communication technology (ICT) has revolutionized various aspects of people's lives, including the social and economic spheres (Fraij, 2021). This widespread impact of technology has also influenced the management practices of businesses. The integration of electronic human resource management (e-HRM) has become a growing trend, as organizations seek to leverage digital tools and systems to streamline HR processes and enhance organizational efficiency. However, the implementation of e-HRM methods and regulations can be challenging due to divergent beliefs, ethics, and behaviors within the organization (Shamout et al., 2022). Employees may resist the adoption of new technologies, and organizations may face difficulties in aligning e-HRM practices with the existing organizational culture and values.

Scholars have also explored the relationship between organizational performance and computerized human resource management, although there is no consensus on the exact nature of this relationship (Al Mashrafi, 2020). While some studies have found positive associations

between e-HRM and various organizational outcomes, such as improved productivity and employee satisfaction, others have reported mixed or inconclusive findings. The complex interplay between e-HRM, organizational context, and performance outcomes requires further investigation to uncover the nuances and contingencies that shape this relationship. Several academic publications have delved into the effects of e-HRM on organizational outcomes, as well as organizational development and performance, offering valuable insights (Obama et al., 2020; Ahmed, 2019; Al-Hmouze, 2016; Atallah, 2016). These studies have provided a foundation for understanding the potential benefits and challenges of e-HRM adoption. However, more research is needed to explore the nuances of e-HRM implementation in the public sector context, considering the distinct organizational characteristics and constraints that may impact the successful integration of digital HR practices.

Limited research has been conducted on the effect of e-HRM (electronic human resource management) on organizational performance, particularly in the context of public sector organizations. The majority of the existing studies have focused on the private sector, examining the impact of e-HRM in specific industries. For instance, Ahmed (2019) explored the impact of e-HRM on manufacturing performance, providing insights into how the adoption of electronic HR practices can influence operational efficiency and productivity in a manufacturing setting. Similarly, Obama et al. (2020) examined the influence of e-HRM on the financial sector's performance, investigating the role of digital HR tools and systems in enhancing financial institutions' competitiveness and profitability.

Furthermore, Wege, Ngige, and Ojukwu (2019) conducted a study on e-HRM and its impact on the performance of academic institutions. This research offered valuable insights into the potential benefits of e-HRM implementation in the education sector, such as improved administrative processes and enhanced student services. While these studies provide useful perspectives on the impact of e-HRM in various organizational contexts, the research on the effect of e-HRM on public sector performance remains scarce. This can be attributed to the unique nature of public sector organizations, which often prioritize social benefits and public service delivery over monetary gains. The objectives, structures, and constraints of public sector entities differ significantly from their private sector counterparts, resulting in a distinct context that may require a different approach to e-HRM implementation and its impact on organizational performance.

In the Ethiopian context, research related to the effect of e-HRM on organizational performance is also limited. The existing studies have primarily focused on factors affecting e-HRM adoption, such as technological, organizational, and environmental factors (Tewodros, 2018; Getinet, 2016). Additionally, there have been studies exploring the impact of human resource practices on organizational performance in the public sector (Abebe and Markos, 2017; Asresash, 2015), but the specific role of e-HRM in shaping public sector outcomes remains underexplored. This scarcity of research in the public sector and the Ethiopian context presents an important gap that warrants further investigation. Addressing this gap would contribute to a more comprehensive understanding of the role of e-HRM in enhancing the efficiency, effectiveness, and service delivery of public sector organizations, ultimately informing evidence-based policymaking and management practices in the digital age. Consequently, it is crucial to investigate whether e-HRM

practices have any discernible effect on organizational performance in public sectors, taking Addis Ababa city Admi istration Kolfe Keraniyo Sub City as a study unit.

2. Research Methodology

According to Kumar(2011), when the is conducted within a specified period and convenient place, a cross- sectional survey design method shall be employed. In particular, as Kothari (2004) noted, explanatory study design helps to build a cause and effect relationship between variables. Therefore, in this study, explanatory design was employed to investigate the effect relationships between various practices of e-HRM and organizational performance. Additionally, descriptive research design was employed to describe the current practice of electronics HRM.

The total employees in the target population in the Kolfe Keranyo sub city 438 (Addis Ababa City Administration office, 2023). Thus, sample size was determined using Yamane (1967) formula for small size with error tolerance of 95% confidence interval. Thus the sample size for this study was approximately 71.6. Thus the sample size was 72. Structured questionnaire was adopted to collect empirical quantitative primary data. The dimensions used to measure e-HRM practices and organizational performance were adopted from adopted from Ahmad et al. (2021), AlHamad et al. (2022), and Nyathi Kekwaletswe (2023) and contextualized from the public sectors in Ethiopia. All items were measured using a 5-point Likert scale due to the reason that it maintains a high response rate and minimizes confusion among respondents.

The data which was collected through self-administered questionnaires, was analyzed using quantitative data analysis methods. The raw data was first processed and checked for missing, incompleteness, outliers, and inconsistencies. Data were coded, and entry to the software, i.e., Statistical Package for the Social Sciences (SPSS), version 27. The study employed both descriptive and inferential statistical tools. All the necessary assumptions were checked and tested.

3. Literature Review

3.1. Meaning of E-Human Resources Management (e-HRM)

Prior to exploring themeaning of e-HRM, it is crucial to recognize and explain its related concepts. Along with e-HRM, other terms used in the literature for the same phenomenon include virtual HRM, HRIS (Bag et al., 2022), business-to-employee (B2E), web-based HRM. In essence, "virtual HRM" refers to the use of technology to connect internal and external HR service providers to help traditional HR departments with their responsibilities. This results in a virtualization of HR procedures. On the other hand, e-HRM encompasses the use of less advanced technology applications, such as sharing of HR processes between a traditional HR department and a candidate through the internet (Al-Harazneh & Sila, 2021). On the other hand, "web based HRM" integrates this idea with Internet technologies.

The definition of e-HRM provided in the literature is significant and unique. Nyathi, M. & Kekwaletswe (2023) define electronic HRM as a technique for implementing different HRM policy, strategy, and practices within businesses through the deliberate and direct use of web-based technological platforms. An automation system is a precisely planned change in a physical or

administrative task utilizing a new process, method, or machine that increases productivity, quality and profit while providing methodological control and analysis. The value of system automation is in its ability to improve efficiency; reduce wasted resources associated with rejects or errors; increase consistency, quality and customer satisfaction; and maximize profit" (Rogiers, Viaene, & Leysen, 2020). The capacity of system automation to boost consistency, quality, and customer happiness, minimize resource loss associated with rejections or faults, and maximize profit is what makes it valuable. E-HRM is also known as the utilization of information technology enabling assisting and connecting at least two actors in their combined performance of HR duties (implementation, planning, provision, and operation).

Similarly, Zhou, Cheng, Zou, & Liu (2022) contends that e-HRM fundamentally unifies and connects staff members with the HR division digitally through the Human Resource portal and grants staff direct Internet access to information systems. Thanks to this e-HRM strategy, all stakeholders and employees now take part in company procedures electronically, which spares people from environmental restrictions and makes it easier for them to work. e-HRM is the administrative support of the HR function in organizations by using internet technology (Gupta, Hassan, Pandey, & Kushwaha, 2022). As noted by Rawashdeh et al. (2022), e-HRM is a way of implementing HRM strategies, policies, and practices in organizations through the conscious and direct support of and/or with the full use of channels based on web-technologies.

Nurlina et al. give a thorough explanation of electronic HRM in the light of the aforementioned descriptions. They claim e-HRM is an umbrella phrase including all conceivable modules & contents between Human resource management & information technologies with the goal of delivering value to specific management and people within and beyond companies (2020), is what e-HRM is. In conclusion, with regard to e-HRM, it is widely noted that the tasks performed by human resource departments inside firms are mostly transferred to the online world. Expectedly, e-HRM solutions aid in the reformation and simplicity of a number of HR operations, including job analysis, selecting, recruitment, training, remuneration, as well as HR planning.

4.2.Theoretical Foundation

4.2.1.Ability, Motivation and Opportunity (AMO) Theory

In 1993, Bailey proposed the AMO framework, which suggests that there are three essential components necessary to ensure employees perform above the minimum requirements: skills, motivation, and opportunities for involvement in decision-making (Appelbaum et al., 2000). According to the AMO view in HRM, the HRM system plays a significant role in influencing employees' skills, attitudes, and behaviors. Specifically, the HRM system impacts employees' ability to perform, which in turn influences their skills; their motivation to perform, which impacts their attitudes; and their opportunity to perform, which affects their behavior (retention, presence).

The AMO framework has been widely accepted in the field of HRM for its ability to explain the relationship between HRM practices and performance. Many studies conducted after 2000 rely on this theoretical framework, either explicitly or implicitly, when exploring this link. As a result, the AMO framework has proven valuable in research for explaining how HRM practices relate to employee performance. Previous studies based on this framework have investigated various HRM

practices, such as recruitment and selection, training and development, performance management systems, and organizational communication (Doshi & Nigam, 2023). However, in this particular study, the AMO framework has been adapted to conceptualize e-HRM and its impact on organizational performance.

4.2.2.Social System Theory

Ludwig von Bertanlanffy introduced the Social Systems Theory in 1956, which is widely recognized as an important aspect of systems thinking. This theory provides an alternative perspective for understanding e-HRM (Ball, 2011). By embracing the social theory as a foundational conceptual standpoint, it suggests that systems or structures should not be viewed as mere machines (Obama et al., 2020). In organizations, which operate as open systems, there are multiple leaders available to receive, consider, and act upon information. Entities and groups form and dissolve alliances, while boundaries remain fluid, undefined, and permeable. However, for the system to function effectively, the management of resources must align with the demands of the environment. Modern HRM, with the support of computerized systems, enables HR departments to outsource non-core tasks, automating and decentralizing administrative and naturalization processes that were previously conducted internally (Akhtar et al., 2014). This results in significant cost savings and underscores the significance of retaining key HR roles.

The theoretical foundation presented in this study has several implications. Firstly, e-HRM facilitates the automation and decentralization of critical HR operations, allowing supervisors to allocate more time to strategic responsibilities such as leadership development and talent management. Secondly, through the creation of measurable metrics, effective HRM empowers the HR function to play a more influential role in driving organizational success and performance.

4.3.Types of E-HRM

Lepak and Snell (1998) have identified and established three distinct categories of e-HRM: operational, relational, and transformational. These models have been widely adopted by scholars and researchers in the field. In a recent study conducted by Iqbal, Ahmad, Raziq, and Borini (2019), the researchers examined the quality of HRM service by incorporating it as an intermediate value-creating variable. Their study focused on exploring the effects of these three categories of e-HRM practices on organizational outcomes. Moreover, the study also delved into how the implementation of e-HRM practices can potentially enhance a company's effectiveness, ultimately contributing to gaining a competitive advantage. This research aligns with the growing understanding that e-HRM practices have the potential to positively impact organizational performance and provide organizations with a strategic edge (Galanaki, Lazazzara & Parry, 2019). By studying these different categories of e-HRM practices and their effects on organizational outcomes, researchers and practitioners can gain valuable insights into how to optimize HRM service quality and leverage e-HRM to improve overall organizational effectiveness. This knowledge can enable organizations to compete more effectively in today's dynamic business environment.

4.3.1.*Operational E-HRM*

The first category of e-HRM is operational e-HRM, which encompasses additional aspects of the

HR Department's regular work, including core HR administrative operations such as payroll management, database administration, and maintenance of personnel records (Marler & Parry, 2019). These operational e-HRM activities are considered the foundational tasks necessary for the existence of effective HRM practices within an organization. By implementing operational e-HRM strategies, the workload of HR professionals can be significantly reduced. This, in turn, leads to faster processing of HRM tasks and reduces the need for routine managerial involvement. Many of these HRM tasks can be efficiently completed using Employee Self-Service (ESS) software, which streamlines and automates various processes. Overall, operational e-HRM plays a pivotal role in simplifying HR processes, improving efficiency, and allowing HR departments to focus on more strategic initiatives. By leveraging the capabilities of ESS software, organizations can optimize their operational e-HRM activities and enhance the overall effectiveness of their HR practices.

4.3.2.*Relational E-HRM*

The second category of e-HRM is relational e-HRM, which focuses on the HR department's interactions and relationships with other departments within the organization, as well as external stakeholders. These activities encompass various HR processes such as electronic hiring and staffing, electronic training, and electronic performance management. Relational e-HRM practices are essential for managing and nurturing the relationships between the organization and its employees. By implementing these practices, organizations can enhance their communication channels with internal and external stakeholders, empowering them to effectively carry out HRM tasks without always relying on direct involvement from the HR department. This approach allows HR specialists to step away from day-to-day operational tasks, enabling them to dedicate their time and expertise to more critical and strategic HR issues. Consequently, relational e-HRM approaches emphasize the importance of interpersonal connections and fostering productive relationships within and outside the organization.

4.3.3.*Transformational E-HRM*

According to Rogiers et al. (2020), the transformational category of e-HRM activities encompasses strategic actions taken by HRM, including organizational transformation processes, strategic redirection, strategic capabilities, and strategic knowledge management. These activities have the potential to fundamentally alter the HRM function by enhancing the strategic direction of various HRM processes and practices. By aligning HRM approaches with strategic management techniques and organizational objectives, the strategic HRM function is established. This results in the development and adoption of HRM policies and procedures that are specifically designed to support the overall business strategy. The primary transformative contribution of e-HRM is seen in the strategic alignment of HRM with the broader business strategy, providing organizational leaders and managers with access to reliable data that informs and supports effective business decision-making.

4.4.E-HRM Practices

Despite there are many functions of e-HRM within the organizations, based on the scope of this study, e-Recruitment and selection, e-training, e-Performance appraisal, and e- compensation system are presented in the subsequent sections.

4.4.1.E-Recruitment and selection (e-RS)

One of the advantages of utilizing the Internet for recruitment is the potential for reduced expenses. This cost-saving benefit stems from a quicker application process and exposure to a significantly larger pool of potential applicants. As a result, both employers and job candidates can save valuable time and resources (AlHamad et al., 2022). These advantages have contributed to the increasing popularity and widespread adoption of electronic recruitment among human resource professionals across various industries. Technology is now not only used to identify suitable candidates for organizations but also to streamline the task allocation process. Therefore, by expediting the hiring process and reducing associated costs, technology-based recruitment enables access to a larger pool of prospective candidates and enhances overall effectiveness.

Al-Hmouze and Salameh (2016) noted that e-selection is the use of electronic means, such as the internet, to evaluate and select job candidates. This can include the use of online assessment tools, such as aptitude and personality tests, as well as virtual interviews and simulations to assess candidates' qualifications and fit for the position. E-selection is becoming increasingly popular among employers as it allows for cost effective and efficient evaluations of a large number of candidates.Based on the context described, e-recruitment heavily relies on digital and web-based technology to streamline the hiring process (Ahmed, 2019). It has become common practice for companies to utilize internet resources, either directly or through third-party platforms, to advertise job openings and allow candidates to apply electronically, saving time and resources (Patel & Dhal, 2017).

These systems often use algorithms to rank applicants based on various factors such as education, work experience, and GPA. In Kenya, organizations employ third-party e-recruitment services like Fuzu, Relief Web International, and Brighter Monday to find suitable candidates. E-selection, a paperless method enabled by advanced computer systems, includes online testing, resume evaluation, and interviews conducted in a virtual environment to assess a candidate's skills and fit for the position (Stone et al., 2015). Many companies utilize online aptitude exams for entry-level positions, followed by video conferencing interviews, eliminating the need for paperwork and offering flexibility in scheduling (Parker, 2014). Organizations are also adopting tools like Zoom to enhance the audio and video quality of applicant interviews. Based on this context, the following null hypothesis was formulated:

H1. E-Recruitment and Selection has no positive and significant effect on organizational performance.

4.4.2.E-Training

The human resources management system plays a crucial role in diagnosing the skills, capabilities, and knowledge of the organization's workforce. This assessment helps in developing effective training and development plans that align with the organization's needs. It also allows for the potential redistribution of employees to suitable positions based on their skills, knowledge, and academic qualifications (Al Hamad, 2016; Ahmad et al., 2020). The advancement of information technology has significantly supported training practices in recent years. It has enabled employees

to access education and training resources without the constraints of physical locations. This has led organizations to foster a continuous learning culture and embrace continuous online training, which ultimately enhances their competitiveness. Furthermore, this approach offers greater flexibility to meet both the current and future needs of the organization.

In the realm of e-learning and training, digital technology plays a crucial role in providing access to knowledge from any location and at any time (Geetha, 2017). It enables the continuous sharing of information without constraints related to time or resources. Virtual classrooms, self-paced learning modules, web conferencing, and professional networking are some of the techniques used in the training process. As multinational corporations expand globally, e-learning has become the preferred method for delivering training and education, offering enhanced organizational efficiency, personnel flexibility, and cost and time reductions (Miller, 2012). While there are similarities between e-training and e-learning in terms of delivery methods and technology used, e-training typically has a shorter learning span and is often tailored to specific learning targets or skill sets (Ramayah et al., 2012). Based on this context, the following null hypothesis was formulated:

H2. E-Training has no positive and significant effect on organizational performance.

4.4.3. *E-Performance Appraisal (E-PA)*

The utilization of the Internet has enabled the performance appraisal process in human resources to be conducted efficiently. Managers can now submit performance appraisal information directly to the HR department through electronic forms, reducing the need for paper-based documentation. This not only saves time but also reduces costs and effort associated with traditional methods of performance appraisal. Additionally, there are self-service applications available to managers, enabling them to enter performance appraisal results promptly and set employee performance goals. These results and plans can be easily accessed and published on employees' personal pages. The primary objective of the performance appraisal system is to monitor and manage employee performance and behavior, ensuring alignment with organizational goals. The use of technology and online platforms streamlines this process, making it more convenient and effective for both managers and employees.

When employees undergo online evaluations to assess their performance in line with job expectations, it is known as an e-Performance Appraisal (E-PA). Research indicates that organizations utilize e-performance appraisal as a means to evaluate employee performance and provide constructive feedback (Cedar Crestone, 2014). Performance appraisal is an important HR activity that is often conducted on an ongoing basis. By leveraging digital technology, organizations can significantly reduce the workload and time required to conduct performance reviews. IT systems can also be utilized by managers to align the organization's goals, plans, and practices with the performance management program. Through E-Performance, top performers throughout the company can be recognized, fostering motivation and retention among high-performing employees. Based on this context, the following null hypothesis was formulated:

H3. E-Performance appraisal has no positive and significant effect on organizational

performance.

4.4.4.E-Compensation System (e-CS)

E-CS is a comprehensive software that encompasses the salary records of all employees within an organization, regardless of their internal or external contract status. This includes consultants, temporary workers, and those employed on hourly or alternative systems (Amoako et al., 2022). Additionally, the system also manages holiday and leave tracking and supports employee retirement plans, healthcare benefits, and other incentives (Obama et al., 2020). E-CS serves various purposes such as the development and implementation of a wage system, provision of benefits, and evaluation of the effectiveness of the compensation system. To establish a compensation system, organizations can identify the important characteristics of each job, determine their relative value through job analysis, and then devise a wage structure by conducting surveys on prevailing wage rates in the labor market. Literature suggests that compensation is a crucial factor in attracting and retaining talented individuals within organizations. It is widely believed that money influences employee behavior and shapes their attitudes, thereby impacting workforce attraction and retention. Web-based software tools, such as e-compensation, provide managers with the means to establish, manage, and report pay plans more efficiently (Zafar, 2021).

E-CS includes all employees' salary records in the organization, whether they work on internal or external contracts such as consultants, as well as those working temporarily with the organization on hourly or any other system organization followed (Amoako et al., 2022). The system also includes holidays and leave tracking, and supports employee retirement plans, health care, and other employee benefits or incentives (Obama et al., 2020). E-CS are used for various purposes such as: developing and implementing a wage system, providing benefits, evaluating compensation system effectiveness. The organization can develop a compensation system by identifying job important characteristics, determining the relative compensating value using job analysis, and converting job evaluation points into the wage structure by surveying wage rates in the labor market. As indicated in the literature, compensation is one of the important issues of attracting and retaining talent in organizations, organizations mainly assume that money influences employee behavior in shaping his attitudes. Therefore, wages affect workforce attraction and retention. Employing web-based software tools, managers may establish, manage, and report pay plans more successfully with e-compensation (Zafar, 2021).

The practice of utilizing software-based approaches to design employee remuneration structures and strategic compensation plans to drive organizational success is known as e-compensation (Stone et al., 2015). By implementing online pay practices to generate compensation reports for employees in real-time, managers can greatly enhance employee retention and foster a more adaptable workforce. The automation and creation of compensation systems have also resulted in reduced administrative costs and time, enabling the organization to become more agile. Based on this context, the following null hypothesis was formulated:

H4. E-Compensation System has no positive and significant effect on organizational performance.

4.6. Conceptual framework

The conceptual framework displayed in Figure 1 below, is developed based on the review result which are previously discussed known theories and findings. It illustrates the relationship between e-HRM practices (independent variable) and organizational performance (dependent variable). The determinant practices of e-HRM encompassing are e-Recruitment and Selection (e-RS), e-Training (e-T), e-Performance Appraisal (e-PA), and e-Compensation system (e-CS). The organizational performance also conceptualized in terms of organizational flexibility, organizational effectiveness, and workforce agility.

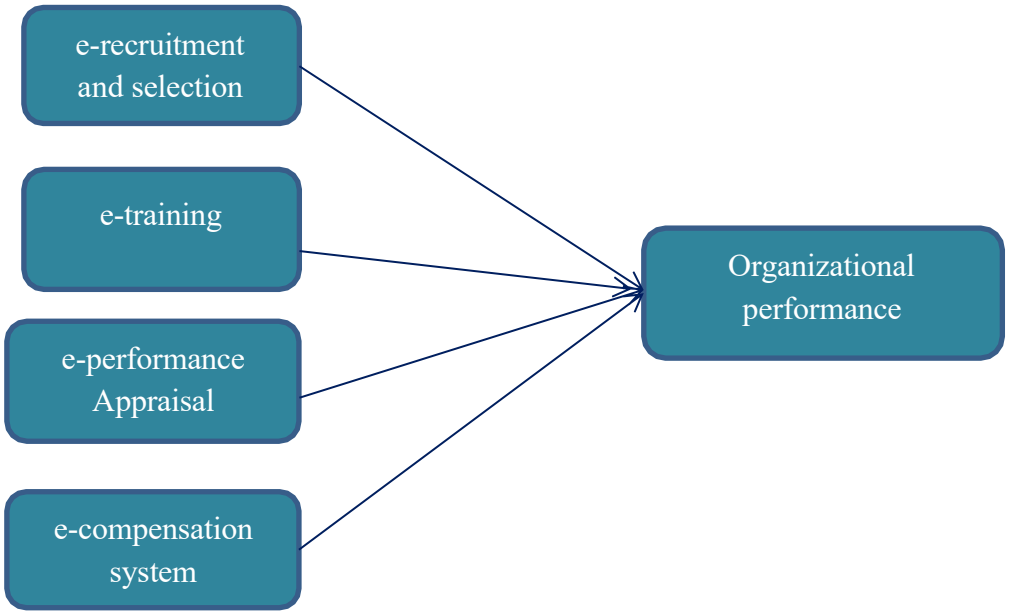

Figure 1: Conceptual model

5.Data Analysis

The demographic information of the respondents is presented using descriptive statistics, focusing on frequency and percentages in the initial section. Electronics human resource management (e-HRM) and its practices are analyzed through mean and standard deviation. The chapter also delves into inferential statistics, detailing the analyses and results of correlation and multiple regression. Finally, further discussion of the findings and testing of hypotheses is included.

5.1.Demographic Characteristics of Respondents

The table shows the background characteristics of the 68 survey respondents from the Kolfe Keraniyo Sub City in 2024. In terms of gender, 64.9% were male and 35.1% were female. The largest age group was 26-35 years old, representing 45.9% of respondents, followed by 18-25 years old (22.0%) and 36-45 years old (20.5%). Regarding educational background, over half (51.9%) had a BA/BSc degree, while 45.1% had an MA/MSc. Most respondents (42.0%) had less than 1 year of work experience, with smaller proportions having 1-5 years (15.6%), 6-10 years (21.0%), 11-15 years (5.9%), and over 15 years (15.6%) of experience.

Table 3: Respondents' background respondents

Variables	Category	Frequency	Valid Percent
Gender	Male	133	64.9
	Female	72	35.1
	Total	***205***	***100.0***
Age group	18-25	45	22.0
	26-35	94	45.9
	36-45	42	20.5
	46-55	10	4.9
	>55	14	6.8
	Total	***205***	***100.0***
Educational background	Diploma	4	1.9
	BA/BSC	107	51.9
	MA/MSC	93	45.1
	Total	***205***	***100.0***
Work experience	<1 Year	86	42.0
	1-5 Years	32	15.6
	6-10 Years	43	21.0
	11-15Years	12	5.9
	>15Years	32	15.6
	Total	***205***	***100.0***

Source: field survey (2024)

5.2. Validity

In order to ensure the validity, the following strategies were carried out. Firstly, items were adopted from previous studies and revised based on the context. Second, the draft measurement instruments reviewed by advisor and external reviewers. Based on the comments, the instrument has been revised. Thirdly, the measurement instrument was pre-tested among purposively selected employees, and revised the instruments based on the results, particularly the content, general protocol, clarity, and relevance of the questionnaire were revised.

5.3.Reliability

The reliability test was carried out using a Cronbach reliability test in which a value of 0.7 and above coefficient alpha will be a cut-off point (Field, 2009; Hair et al., 2010). Results in Table 1 shows a reliability of the instruments. The internal consistency of constructs are reliable, with an alpha coefficient greater than 0.7.

Table 1: Reliability measurement

Variables	Cronbach's Alpha	Number of items
e-recruitment and selection	**.906**	10
e-training	**.865**	9
e-performance Appraisal	**.886**	10
e-compensation system	**.881**	10
Overall reliability	**.885**	**39**

Source: Survey, 2024

5.4. Statistical Assumption Tests

5.4.1. Normality Test

Visually assessing the normality of a data set can be achieved through various graphical methods. These methods provide a visual representation of the data distribution, enabling the identification of departures from normality. A histogram is a graphical representation of the data's frequency distribution, displaying the data as bars with the height of each bar representing the frequency or proportion of observations within a specific range. In a normal distribution, the histogram will generally exhibit a bell-shaped curve. To check for normality, the researcher followed the suggestions provided by Hair et al. (2010) and generated a histogram of the data, overlaying a normal distribution curve calculated using the mean and standard deviation of the dataset. This visual assessment can help identify departures from normality, such as skewness, kurtosis, or multimodality, which are important considerations when working with statistical methods that assume normality.

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

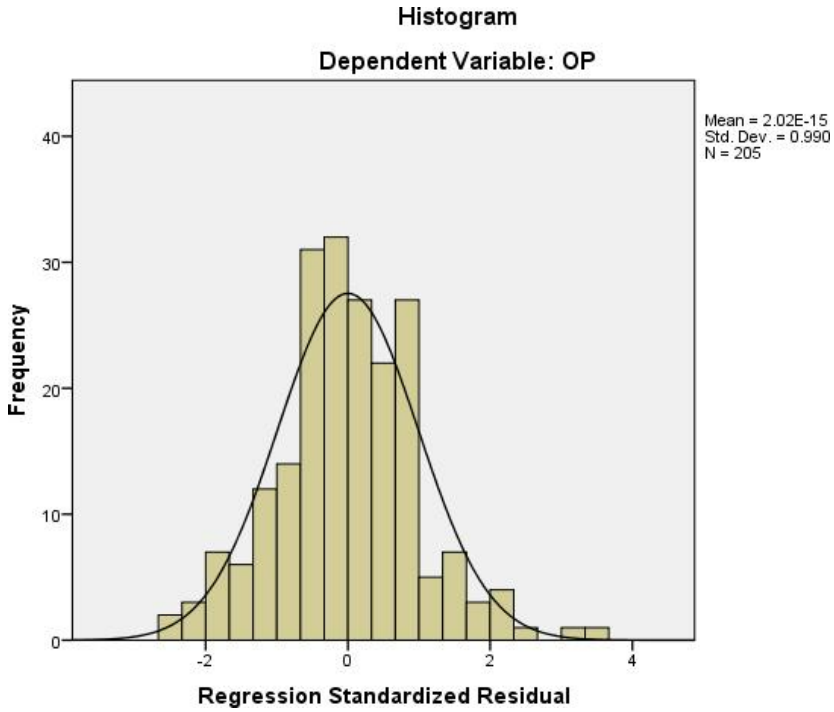

Figure 2: Histogram

5.4.2. *Linearity and Homoscedasticity*

The researcher employed various graphical methods to evaluate the assumptions of linearity and homoscedasticity in the linear regression model. Specifically, they utilized P-P plots of residual and predicted values, as well as scatter plots of standardized residuals and regression standardized predictive values. The P-P plots allowed for a visual assessment of the distributional similarity between the observed residuals and the expected residuals under the assumption of linearity, with the points on the plot aligning closely with the diagonal line, suggesting that the linearity assumption holds. Moreover, the scatter plots of standardized residuals and regression standardized predictive values exhibited a random dispersion of points around the horizontal line (zero), indicating homoscedasticity, where the variability of residuals remains constant across different levels of the predicted values. Based on these findings, the researcher concluded that the variables in the model satisfied the linearity assumption, and the model demonstrated homoscedasticity, providing support for the validity of the linear regression model used in the analysis.

European Economic Letters
ISSN 2323-5233
Vol 15, Issue 3 (2025)
http://eelet.org.uk

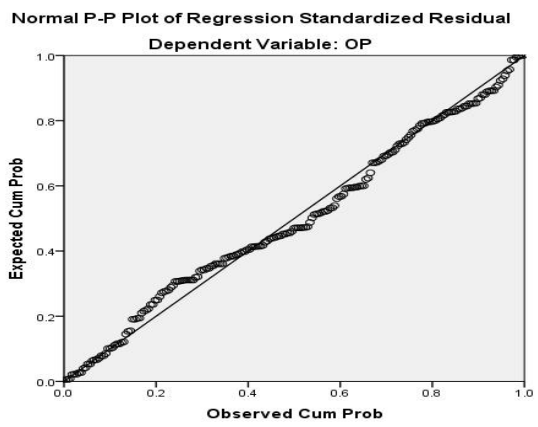

Figure 3: Normal P-P Plot

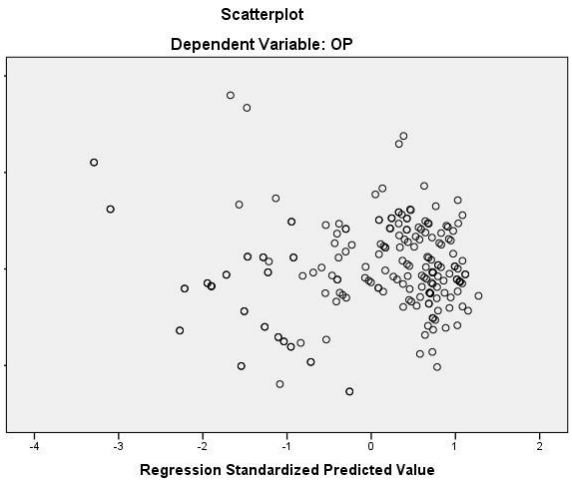

Figure 4: Scatter plot

5.4.3. Mutli-collinearity

The researcher conducted a thorough check for multicollinearity issues before proceeding with the regression analysis. Multicollinearity arises when independent variables exhibit high correlations, leading to shared predictive power. Tolerance and Variance Inflation Factors (VIF) are common diagnostics used to detect multicollinearity. A tolerance value close to 1 and a VIF value around 1 (but not exceeding 10) indicate no multicollinearity between variables. As per Mills et al. (2010), tolerance levels above 0.10 and VIF values below 10, as observed in Table 13, suggest the absence of multicollinearity. This robust assessment ensures the reliability and accuracy of the regression model results.

Table 3: Multicollinarity

Model		Collinearity Statistics	
		Tolerance	VIF
1			
	E-Recruitment and selection	.441	2.267
	E-Training	.470	2.126
	E-Performance Appraisal	.429	2.329
	E-Compensation System	.433	2.312

5.4.4. Autocorrelation

The Durbin-Watson statistic is a measure of autocorrelation, which examines whether there is a pattern or correlation between the residuals of a regression analysis. The statistic ranges from 0 to 4, with a value close to 2 indicating no significant autocorrelation, a value less than 2 suggesting positive autocorrelation, and a value greater than 2 suggesting negative autocorrelation. In this case, the Durbin-Watson statistic is 1.77. The Durbin-Watson statistic is a measure used in regression analysis to detect the presence of autocorrelation in the residuals of a regression model. The Durbin-Watson statistic takes on values between 0 and 4, with a value around 2 indicating no

significant autocorrelation.

In the case provided, a Durbin-Watson statistic of 1.775 suggests that there might be a positive autocorrelation in the residuals of the regression model. When the Durbin-Watson statistic is around 2, it is generally considered favorable because it indicates that the regression model is free from significant autocorrelation. This is important as it allows for reliable estimation of coefficients and valid hypothesis testing.

5.5. Correlation results

The correlation analysis presented in Table 14 which provides the relationship between E-HRM (Electronic Human Resource Management) and Organizational Performance (OP) from the public sector perspective in Kolfe Keranio Sub City.

The result shows that E-Recruitment and Selection (E-RS) has a strong positive correlation with Organizational Performance ($r = 0.712$, $p < 0.01$), indicating that as the effectiveness of E-Recruitment and Selection practices increases, it is significantly associated with improved organizational performance. Similarly, E-Training (E-T) exhibits a strong positive correlation with Organizational Performance ($r = 0.650$, $p < 0.01$), suggesting that the implementation of effective E-Training practices is significantly related to enhanced organizational performance.

The result also shows that E-Performance Appraisal (E-PA) has a moderate positive correlation with Organizational Performance ($r = 0.495$, $p < 0.01$), implying that improvements in E-Performance Appraisal practices are moderately associated with better organizational performance. Interestingly, E-Compensation and Rewards (E-CS) has a strong positive correlation with Organizational Performance ($r = 0.720$, $p < 0.01$), indicating that the effectiveness of E-Compensation and Rewards practices is significantly linked to improved organizational performance.

Therefore, the correlation results shows that all the E-HRM dimensions (E-RS, E-T, E-PA, and E-CS) have a statistically significant positive relationship with Organizational Performance in the public sector context of Kolfe Keranio Sub City. The strongest associations are observed between E-Recruitment and Selection, E-Compensation and Rewards, and Organizational Performance, suggesting that these E-HRM practices play a crucial role in enhancing organizational performance in the public sector.

Table 4: Correlation results

		E-RS	E-T	E-PA	E-CS	OP
E-RS	Pearson Correlation	1	.670**	.613**	.531**	712**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	205	205	205	205	205
E-T	Pearson Correlation	.670**	1	.483**	.589**	.650**
	Sig. (2-tailed)	.000		.000	.000	.000

	N	205	205	205	205	205
E-PA	Pearson Correlation	.613**	.483**	1	.695**	.495**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	205	205	205	205	205
E-CS	Pearson Correlation	.531**	.589**	.695**	1	.720**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	205	205	205	205	205
OP	Pearson Correlation	.712**	.650**	.495**	.720**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	205	205	205	205	205
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: Field Survey (2024)

5.6. Regression Results

The study employed a multiple regression model to examine the hypothesized relationships between E-RS, E-T, E-PA, E-CS and OP. The primary objective was to estimate coefficients for each linear model. Tables 5, 6, and 7 were used to present the relationships and outcomes of causality tests, including standardized coefficients, among the variables in the final model.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.810[a]	.657	.650	4.15451	1.738

Source; Field Survey (2024)

Regression analysis was conducted to examine the relationship between the independent variables (E-RS, E-T, E-PA, E-CS) and the dependent variable (OP). The results indicate a strong positive correlation, with a multiple correlation coefficient (R) of 0.810, suggesting that the independent variables have a substantial influence on the dependent variable. Approximately 65.7% of the variability in the dependent variable was explained by the independent variables, as indicated by the coefficient of determination (R Square) of 0.657. The adjusted R Square, which considers the number of predictors and sample size was 0.650, indicating that about 65% of the variance in the dependent variable can be attributed to the independent variables, considering the complexity of the model. The R Square Change of 0.657 illustrates the difference in R Square between the full model and an empty model, showing the overall contribution of the predictors to the model's explanatory power.

The F Change value of 95.591 indicates the overall significance of the regression model,

suggesting that the inclusion of the predictors significantly improves the model's fit compared to an empty model. Therefore, this analysis reveals a strong positive relationship between the independent variables and the dependent variable, with the independent variables explaining a significant portion of the variance in the dependent variable.

Table 6: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6599.587	4	1649.897	95.591	.000[b]
	Residual	3451.993	200	17.260		
	Total	10051.580	204			
a. Dependent Variable: OP						
b. Predictors: (Constant), E-RS, E-T, E-PA, E-CS						

Source: Field Survey (2024)

Upon analyzing the ANOVA table, it is evident that the regression model was highly significant. The predictors (E-RS, E-T, E-PA, E-CS) collectively made a substantial contribution to explaining the variance observed in the dependent variable (OP). This assertion was supported by the remarkably high F-value of 95.591, which was associated with a p-value of 0.000. Thus, we can confidently conclude that the regression model provides a significant and valuable explanation for the relationship between the predictors and the dependent variable.

The regression analysis presented in Table 7, Coefficients provides a deeper understanding of the effect of different E-HRM dimensions on Organizational Performance in the public sector context of Kolfe Keranio Sub City.

The result shows that the unstandardized coefficient (B) of 0.096 indicates that a one-unit increase in the effectiveness of E-RS practices is associated with a 0.096 increase in Organizational Performance, holding other variables constant. The standardized coefficient (Beta) of 0.133 suggests that this variable has a moderate positive effect on Organizational Performance. The statistical significance of this relationship, indicated by the t-statistic of 2.128 and the p-value of 0.035, which is less than the 0.05 significance level, underscores the importance of effective E-RS practices in enhancing organizational performance. Thus, the null hypothesis was rejected.

Similarly, E-T exhibits a positive and significant effect on Organizational Performance. The unstandardized coefficient (B) of 0.128 implies that a one-unit increase in the effectiveness of E-T practices is associated with a 0.128 increase in Organizational Performance, holding other variables constant. The standardized coefficient (Beta) of 0.173 suggests that E-Training has a moderate positive effect on Organizational Performance. The statistical significance of this relationship, indicated by the t-statistic of 2.864 and the p-value of 0.005, which is less than the 0.05 significance level, highlights the crucial role of E-Training in improving organizational performance. Therefore, in support of H2, the null hypothesis was rejected.

The regression analysis further reveals that E-PA) has a strong positive influence on

Organizational Performance. The unstandardized coefficient (B) of 0.383 suggests that a one-unit increase in the effectiveness of E-Performance Appraisal practices is associated with a 0.383 increase in Organizational Performance, holding other variables constant. The standardized coefficient (Beta) of 0.422 indicates that E-Performance Appraisal has a moderately strong positive effect on Organizational Performance. The statistical significance of this relationship, as indicated by the t-statistic of 6.668 and the p-value of 0.000, which is less than the 0.05 significance level, indicates the pivotal role of E-Performance Appraisal in enhancing organizational performance. Hence, in support of H3, null hypothesis was rejected.

The regression analysis reveals that E-CS has a strong positive influence on Organizational Performance. The unstandardized coefficient (B) of 0.388 suggests that a one-unit increase in the effectiveness of E-Compensation and Rewards practices is associated with a 0.388 increase in Organizational Performance, holding other variables constant. The standardized coefficient (Beta) of 0.427 indicates that E-Compensation and Rewards has a moderately strong positive effect on Organizational Performance. The statistical significance of this relationship, as indicated by the t-statistic of 6.783 and the p-value of 0.000, which is less than the 0.05 significance level, highlights the crucial role of E-Compensation and Rewards in enhancing organizational performance. Thus, in support of H4, null hypothesis was rejected.

Table 7: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.661	1.444		2.536	.012
	E-Recruitment and selection	.096	.045	.133	2.128	.035
	E-Training	.128	.045	.173	2.864	.005
	E-Performance appraisal	.383	.057	.422	6.668	.000
	E-Compensation system	.388	.057	.427	6.783	.000

7.Discussion

7.1.The Effect of E-Recruitment & Selection on Organizational Performance

The findings of this study's hypothesis test support the conclusions of previous research, indicating that E-RS has a significant positive impact on OP, with a coefficient of 0.096 and a statistical significance level of $p< 0.05$.These findings are consistent with the arguments put forth by scholars in the field. Ahmed (2019) has emphasized the role of e-recruitment in facilitating the hiring process by utilizing a wide range of internet platforms, either directly or through intermediaries, to identify and attract potential candidates. This approach aligns with the idea that e-recruitment streamlines the recruitment process and enhances organizational performance. Similarly, Patel and Dhal (2017) have proposed the use of objective algorithms to evaluate and rank applicants based on relevant factors such as education, work experience, and GPA. The adoption of such algorithms can ensure a more efficient and effective screening process, increasing the likelihood of selecting suitable candidates, which in turn can lead to improved

organizational performance.

Furthermore, the adoption of a paperless approach, known as E-Selection, as highlighted by Stone et al. (2015) and Parker (2014), holds significant importance in assessing a candidate's skills and suitability for a given position. This approach, which includes online assessments and video interviews, allows recruiters to evaluate candidates in a more streamlined and convenient manner, potentially leading to improved organizational performance.

The findings of this study are also supported by the work of Galanaki (2021), who found that the use of e-recruitment and selection tools can lead to a more efficient and effective hiring process, resulting in the recruitment of better-qualified candidates and, consequently, improved organizational performance. Similarly, Dineen and Noe (2019) have emphasized the role of social media and other online platforms in enhancing the reach and effectiveness of e-recruitment, which can contribute to the identification and selection of high-performing employees, ultimately improving organizational performance.

Moreover, the findings of this study align with the existing body of research, which suggests that the effective implementation of E-RS practices can have a significant positive impact on organizational performance. The use of e-recruitment platforms, objective candidate evaluation algorithms, and paperless selection processes can streamline the hiring process and facilitate the selection of suitable candidates, leading to improved organizational outcomes.

7.2.The Effect of E-Training on Organizational Performance

The findings of this study provide empirical evidence supporting a statistically significant positive relationship between E-T and Organizational Performance (OP). The coefficient of E-T is estimated at 0.128 with a significance level of $p < 0.05$, indicating that E-T has a significant impact on OP. These findings are consistent with the arguments put forth by scholars in the field. For example, Geetha (2017) has emphasized the role of digital technology in e-learning and training, enabling access to knowledge anytime and from anywhere. This approach facilitates the sharing of information without time or resource constraints. Techniques such as virtual classrooms, self-paced learning modules, web conferencing, and professional networking are employed in the training process, allowing for flexible and efficient delivery of training content.

Miller (2012) highlighted the effectiveness of e-learning, particularly in the context of large global corporations, where it has emerged as an efficient method for delivering training and education. E-learning enhances organizational efficiency and personnel flexibility while reducing costs and time investments associated with traditional training methods. Similarly, Srivastava and Saxena (2020) found that the implementation of e-learning and digital training initiatives can lead to improved employee skills, knowledge, and productivity, which in turn contribute to enhanced organizational performance.

The findings of this study align with the work of Arkorful and Abaidoo (2015), who emphasized the potential of e-learning to improve access to training, facilitate self-paced learning, and enable the customization of learning content to meet the specific needs of employees. These factors can

ultimately lead to increased employee competence and organizational effectiveness. Huang and Qi (2018) have underscored the importance of e-training in the development of employee skills and the acquisition of new knowledge, which can enhance organizational adaptability and responsiveness to changing market conditions, thereby improving overall organizational performance.

Furthermore, the findings of this study are supported by a growing body of research that highlights the positive impact of e-learning and digital training initiatives on organizational performance. The flexibility, accessibility, and customization afforded by e-training can contribute to improved employee skills, knowledge, and productivity, ultimately leading to enhanced organizational efficiency and effectiveness.

7.3. The Effect of E-Compensation System on Organizational Performance

The results of the hypothesis test conducted in this study provide strong evidence of a highly statistically significant relationship between E-Compensation (EC) and Organizational Performance (OP). The coefficient for EC is estimated at 0.388, indicating that a one-unit increase in EC is associated with an increase in OP by 0.388 units. The standardized coefficient (Beta) for EC is 0.427, suggesting that a one-unit increase in EC corresponds to a 0.427 standard deviation increase in OP, considering the scales of the variables. The t-value for EC is 6.783, indicating a high level of statistical significance. Additionally, the associated p-value of 0.000 provides strong evidence for the statistical significance of the coefficient, as it is significantly smaller than 0.001. These findings highlight the substantial and positive impact of EC on OP.

The findings of this study are consistent with previous research by Stone et al. (2015) and SHRM (2007), who have discussed the strategic use of software approaches to model employee remuneration structures and develop comprehensive compensation plans, encompassing both monetary and non-monetary components, which is commonly known as e-compensation. Stone et al. (2015) found that the implementation of online pay practices, allowing managers to generate compensation reports in real-time, has been found to greatly enhance employee retention and improve workforce adaptability. As a result, organizations become more agile and responsive to changing demands.

Furthermore, the SHRM (2007) report highlighted that the automation and creation of compensation systems have contributed to a reduction in administrative expenses and time, further enhancing the organization's adaptability. Thus, the findings of this study provide robust evidence of the significant and positive influence of EC on OP. They support the notion that leveraging e-compensation strategies, such as software-based approaches and online pay practices, can strategically drive organizational success by positively impacting employee performance, retention, and organizational flexibility. The findings align with the arguments made by Stone et al. (2015), who have emphasized the strategic advantages of e-compensation systems in improving employee retention, organizational agility, and cost-effectiveness, ultimately contributing to enhanced organizational performance.

7.4.The Effect of E-Performance Appraisal on Organizational Performance

The results of the hypothesis test provide compelling evidence of a highly statistically significant relationship between E-PA and OP. The coefficient for E-PA is estimated at 0.383, indicating that a one-unit increase in E-PA is associated with an increase in OP by 0.383 units. The standardized coefficient (Beta) for E-PA is 0.422, suggesting that a one-unit increase in E-PA corresponds to a 0.422 standard deviation increase in OP, considering the scales of the variables. The t-value for E- PA is 6.668, indicating a high level of statistical significance. Furthermore, the associated p-value of 0.000 provides strong evidence for the statistical significance of the coefficient, as it is significantly smaller than 0.001. These findings highlight a significant and positive impact of E-PA on OP.

These findings are supported by recent research. A study by Cedar Crestone (2014) suggests that E-Performance Appraisal enables companies to assess employee performance and receive timely feedback. This use of digital technology can significantly reduce the workload and time required to conduct performance reviews. The authors argue that the effective utilization of contemporary technologies in performance management programs helps organizations achieve their goals, plans, and practices.

Furthermore, Jarrar and Schiuma (2007) highlight how E-Performance can aid in the identification and motivation of top-performing employees across the company. By leveraging digital platforms for performance appraisal, organizations can more efficiently and objectively assess employee contributions, leading to better-informed decision-making and the strategic deployment of human resources. A more recent study by Noe et al. (2020) also emphasizes the benefits of E-Performance Appraisal in enhancing organizational effectiveness. The authors found that the use of digital tools for performance management can improve transparency, reduce bias, and foster a culture of continuous feedback, all of which contribute to improved employee engagement and, ultimately, organizational performance.

In the context of the current findings, the existing literature provides strong support for the significant and positive impact of E-PA on OP. The ability of digital performance management systems to streamline processes, enhance objectivity, and drive employee motivation aligns with the results of this study, underscoring the strategic value of incorporating E-PA into an organization's talent management practices

8. Conclusion

The findings of this study provide strong evidence that ER (E-Employee Recruitment) has a significant effect on OP (Organizational Performance). The positive coefficient of 0.096 indicates that as E-RS increases, OP tends to increases. The statistical significance level of $p < 0.05$ further reinforces the robustness of this relationship. The result shows the role of e-recruitment in streamlining the hiring process, attracting candidates through internet platforms, and employing objective algorithms for evaluation. The adoption of paperless approaches, such as E-Selection, is also emphasized as a significant factor in assessing candidate skills and suitability. Taken together, these findings support the understanding that ER plays a crucial role in enhancing organizational performance. Organizations that effectively utilize e-recruitment strategies, including the use of

objective algorithms and paperless approaches, are likely to experience improved performance outcomes.

In addition to this, the findings of this study provide compelling empirical evidence that supports a statistically significant relationship between E-Training) and OP. The estimated coefficient of E-T at 0.128, along with a significance level of $p < 0.05$, indicates that E-T has a significant and positive impact on OP. The findings reveals the advantages of e-training, such as widespread access to knowledge regardless of time and location, various techniques employed in the training process, and the ability to enhance organizational efficiency and flexibility. These findings collectively indicate that organizations can benefit from implementing E-T strategies supported by digital technology. Therefore, by leveraging e-training methods, public sectors can improve their overall performance, including knowledge dissemination, flexible learning environments, resource allocation, efficiency, cost savings, and time management.

The results of this study provide a strong evidence of a highly statistically significant relationship between E-CS and OP. The estimated coefficient of EC at 0.388, the standardized coefficient (Beta) of 0.427, the high t-value of 6.783, and the associated p-value of 0.000 all emphasize the substantial and positive effect of E-CS on OP. This study indicates that the strategic use of software approaches in modeling employee remuneration structures and developing comprehensive compensation plans. The implementation of online pay practices and automation of compensation systems have been found to enhance employee retention, workforce adaptability, organizational agility, and responsiveness to changing demands, while reducing administrative expenses and time.

Furthermore, the findings of this study provide compelling evidence of a highly statistically significant relationship between E-PA and OP. The estimated coefficient of E-PA at 0.383, the standardized coefficient (Beta) of 0.422, the high t-value of 6.668, and the associated p-value of 0.000, indicating a significant and positive effect of E-PA on OP. These finding highlights the benefits of E-PA in assessing employee performance, providing timely feedback, and reducing the workload and time required for performance reviews. The effective utilization of digital technology in performance appraisal can enhance organizational performance outcomes by efficiently evaluating employees, offering feedback, and identifying top performers.

9. Recommendations

Based on the findings presented in the study, here are some possible recommendations:

- Public sectors should focus on improving their e-recruitment processes by leveraging objective algorithms and paperless approaches. This can streamline the hiring process, attract candidates through online platforms, and improve the assessment of candidate skills and suitability. By adopting these strategies, organizations can enhance their recruitment outcomes and ultimately improve organizational performance.
- Invest in E-Learning and Training is critical to improve organizational performance. Thus, public sectors should prioritize the implementation of e-learning and training programs supported by digital technology. This can provide employees with widespread access to knowledge, regardless of time and location. In particular, by employing various techniques in the

training process, organizations can enhance employee skills and knowledge, leading to improved organizational efficiency, flexibility, resource allocation, cost savings, and time management.

- As the study reveals, it needs to optimize E-Compensation practices. Thus, public sectors should consider adopting online pay practices and automating compensation systems. By strategically utilizing software approaches to model employee remuneration structures and develop comprehensive compensation plans, organizations can enhance employee retention, workforce adaptability, organizational agility, and responsiveness to changing demands. Additionally, this can help reduce administrative expenses and save time associated with compensation management.
- Implement Effective E-Performance Appraisal (EPA). Public sectors should leverage digital technology in performance appraisal processes. By efficiently evaluating employee performance, providing timely feedback, and reducing the workload and time required for performance reviews, organizations can improve their overall performance outcomes. This includes identifying top performers, addressing performance gaps, and fostering a performance-driven culture within the organization.

10. Future Research Directions

Future research on e-HR practices could explore the integration of AI and machine learning in employee recruitment to enhance efficiency and effectiveness, personalized and adaptive learning approaches in e-learning and training to improve learning outcomes, ensuring equity and fairness in e-compensation systems, leveraging new technologies like wearables and data analytics in technology-enabled performance management, and assessing the long-term impact and sustainability of e-HR strategies as organizations continue to adopt these digital HR practices.

11. Acknowledgement

I am indebted to employees and management of the Kolfe Keranyo subcity of Addis Ababa city Administration. They wholeheartedly helped me by taking their time to fill and return the questionnaire on time, which in turn helped me a lot to complete my research. They willingly shared their valuable thought s and opinion, which was the building block of my research study,. Without their active and wilful participation, this research paper might not be completed as you you see it today. Again I want to say thank you very much for your support and keep it on.

12. Funding

This research did not receive any specific grant from funding agencies in the public,commercial, or not-for-profit sectors.

13. References

1. Ahmad, A., Alshurideh, M., Al Kurdi, B., Aburayya, A., & Hamadneh, S. (2021). Digital transformation metrics: a conceptual view. *Journal of management Information and Decision Sciences*, 24(7), 1-18.
2. Ahmed, A. (2019). The role of e-recruitment in the hiring process. Journal of Human Resource Management, 21(2), 52-67.
3. Ahmed, M. T. (2019). E-HRM Practices and its impact on organizational performance: A study on the manufacturing industry in Bangladesh. European Journal of Business and

Management, ISSN, 2222-1905.
4. Al Mashrafi, K. A. S. (2020). Human resource management and the electronic human resource (E- HRM): A literature review. International Journal of Management and Human Science (IJM HS), 4(2), 44-53.
5. Al-Alwan, M., Bader, D., Al-Qatawneh, M., Alneimat, S., & Al-Hawary, S. (2022). E-HRM and employee flexibility in Islamic banks in Jordan. International Journal of Data and Network Science, 6(3), 703-710.
6. AlHamad, A., Alshurideh, M., Alomari, K., Kurdi, B., Alzoubi, H., Hamouche, S., & Al-Hawary, S. (2022). The effect of electronic human resources management on organizational health of telecommuni-cations companies in Jordan. International Journal of Data and Network Science, 6(2), 429-438.
7. Al-Harazneh, Y. M., & Sila, I. (2021). The impact of E-HRM usage on HRM effectiveness: highlighting the roles of top management support, HR professionals, and line managers. Journal of Global Information Management (JGIM), 29 (2), 118-147.
8. Al-Hmouze, L. H., & Salameh, H. (2016). The impact of electronic human resource management (E-HRM) application on organizational performance. Middle East University.
9. Almashyakhi, A. M. (2022). An evidence-based review of e-HRM and its impact on strategic human resource management. Journal of Human Resource and Sustainability Studies, 10(3), 542-556.
10. Amoako, R., Jiang, Y., Frempong, M. F., Tetteh, S., & Adu-Yeboah, S. S. (2022). Examining the effect of organizational leadership, organizational structure, and employee technological capability on the success of electronic human resource management. SAGE Open, 12(2), 21582440221088852.
11. Amrutha, V. N., & Geetha, S. N. (2020). A systematic review on green human resource management: Implications for social sustainability. *Journal of Cleaner production*, 247, 119131.
12. Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2001). Reviewed Work:Manufacturing Advantage: Why High-Performance Work Systems Payoff. *The Academy of Management Review*,26(3), 459–462.
13. Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 12(1), 29-42.
14. Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.
15. Bag, S., Dhamija, P., Pretorius, J. H. C., Chowdhury, A. H., & Giannakis, M. (2022). Sustainable electronic human resource management systems and firm performance: an empirical study. *International Journal of Manpower*, 43(1), 32-51.
16. Bondarouk, T., Parry, E., & Furtmueller, E. (2017). Electronic HRM: four decades of research on adoption and consequences. *The International Journal of human resource management*, 28(1), 98-131.
17. Cedar Crestone. (2014). HR systems survey: HR technologies, service delivery approaches, and metrics. Cedar Crestone.
18. De Alwis, A. C., Andrlić, B., & Šostar, M. (2022). The Influence of E-HRM on modernizing the role of HRM context. *Economies*, 10(8), 181.

19. Dineen, B. R., & Noe, R. A. (2019). The impact of social media on the recruitment and selection process. *International Journal of Selection and Assessment*, 27(3), 224-236.
20. Doshi,P & Nigam, P. (2023). Analyzing the effect of AMO framework on the employee's voice behavior. *Journal of Organizational Effectiveness: People and Performance*, 10 (2), 218- 232.
21. Field, A. (2009). *Discovering Statistics Using IBM SPSS Statistics* (3th ed). Lose Angeles, Sage Publication.
22. Fraij, J. (2021). E-HRM to overcome HRM challenges in the pandemic. *SEA–Practical Application of Science*, 9(25), 41-49.
23. Galanaki, E. (2021). The decision to recruit online: Differences in perceptions between human resource managers and job seekers. *International Journal of Manpower*, 42(3), 520-536.
24. Galanaki, E., Lazazzara, A., Parry, E. (2019). *A Cross-National Analysis of E-HRM Configurations: Integrating the Information Technology and HRM Perspectives*. In: Lazazzara, A., Nacamulli, R., Rossignoli, C., Za, S. (eds) Organizing for Digital Innovation. Lecture Notes in Information Systems and Organisation, vol 27. Springer, Cham. https://doi.org/10.1007/978-3-319-90500-6_20
25. Geetha, R. (2017). The impact of digital technology on e-learning and training. *International Journal of Engineering and Technology,* 9(2), 1066-1072.
26. Gupta, M., Hassan, Y., Pandey, J., & Kushwaha, A. (2022). Decoding the dark shades of electronic human resource management. *International Journal of Manpower*, 43(1), 12-31.
27. Hosain, S. (2017). The impact of E-HRM on organizational performance: Evidence from selective service sectors of Bangladesh. *International Journal of Human Resources Management* (IJHRM) ISSN (P), 2319-4936.
28. Huang, Q., & Qi, E. (2018). The impact of e-training on organizational performance: An empirical study. *International Journal of Advanced Computer Science and Applications*, 9(6), 260- 265.
29. Iqbal, N., Ahmad, M., Raziq, M. M., & Borini, F. M. (2019).Linking E-HMR practices and organizational outcomes: an empirical analysis of line manager's perception. *Revista Brasileira de Gestão de Negócios*, 21(1), 48-69.
30. Jarrar, Y. F., & Schiuma, G. (2007). Measuring performance in the public sector: challenges and trends. *Measuring Business Excellence*,11(4),4-8.https://doi.org/10.1108/13683040710837883
31. Lepak, D. P., & Snell, S. A. (1998). Virtual HR: Strategic human resource management in the 21st century. *Human Resource Management Review*, 8 (3), 215−234.
32. Marler, J.H. and Parry, E. (2016). Human resource management, strategic involvement and e- HRM technology. *The International Journal of Human Resource Management*, 27 (19) 2233-2253.
33. Martínez-Caro, E., Cegarra-Navarro, J. G., & Alfonso-Ruiz, F. J. (2020). Digital technologies and firm performance: The role of digital organisational culture. Technological Forecasting and Social Change, 154, 119962.
34. Martini, M., Cavenago, D., & Marafioti, E. (2021). Exploring types, drivers and outcomes of social eHRM. Employee Relations: The International Journal, 43(3), 788-806.
35. Miller, J. (2012). The effectiveness of e-learning in corporate training programs. *The*

International Journal of Management Education, 10(2), 131-138.
36. Myllymäki, D. (2021). Beyond the 'e-'in e-HRM: integrating a sociomaterial perspective. The International Journal of Human Resource Management, 32(12), 2563-2591.
37. Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2020). *Human resource management: Gaining a competitive advantage* (11th ed.). McGowan-Hill Education.
38. Nurlina, N., Situmorang, J., Akob, M., Quilim, C. A., & Arfah, A. (2020). Influence of e-HRM and human resources service quality on employee performance. The Journal of Asian Finance, Economics and Business, 7(10), 391-399.
39. Nyathi, M., & Kekwaletswe, R. (2023). Realizing employee and organizational performance gains through electronic human resource management use in developing countries. African Journal of Economic and Management Studies, 14(1), 121-134.
40. Obama, M. A., Keino, D. C., Kyongo, J. K., Muriithi, S. M., & Amata, E. (2020). Effects of Electronic Human Resource Management Practices on Organizational Performance: A Case of University of Maryland Programs, Nairobi Kenya.
41. Parker, O. (2014). The transition to e-selection: Exploring the impact on the recruitment process.*Human Resource Management Review*, 24(1), 174-183.
42. Patel, C., & Dhal, M. (2017). Algorithmic screening of job applicants: Toward a fairer future? *Business Horizons*, 60(5), 719-732.
43. Rathee, R., & Bhuntel, M. R. (2021). A study on employee perception about the use of e-HRM in IT. SCMS Journal of Indian Management, 18(1), 37-47.
44. Rawashdeh, A. M., Elayan, M. B., Alhyasat, W., & Shamout, M. D. (2021). Electronic human resources management perceived usefulness, perceived ease of use and continuance usage intention: the mediating role of user satisfaction in Jordanian hotels sector. International Journal for Quality Research, 15(2), 679.
45. Rogiers, P., Viaene, S., & Leysen, J. (2020). The digital future of internal staffing: a vision for transformational electronic human resource management. Intelligent Systems in Accounting, Finance and Management, 27(4), 182-196.
46. Shah, N., Michael, F., & Chalu, H. (2020). Conceptualizing challenges to electronic human resource management (e-HRM) adoption: A case of Small and Medium Enterprises (SMEs) in Tanzania. Asian Journal of Business and Management, 8(4).
47. Shamout, M., Elayan, M., Rawashdeh, A., Kurdi, B., & Alshurideh, M. (2022). E-HRM practices and sustainable competitive advantage from HR practitioner's perspective: A mediated moderation analysis. International Journal of Data and Network Science, 6(1), 165-178.
48. SHRM. (2007). *The future of the HR profession. Society for Human Resource Management*.
49. Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). Influences of the industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. Sustainability, 12(10), 4035.
50. Srivastava, P., & Saxena, A. (2020). Enhancing employee productivity through e-learning and digital training initiatives. *Human Resource Management International Digest*, 28(4), 1-4.
51. Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216-231.

52. Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216-231. https://doi.org/10.1016/j.hrmr.2015.01.002
53. Umar, T. R., Yammama, B. A., & Shaibu, R. O. (2020). The implications of adopting and implementing electronic human resource management practices on job performance. Journal of Human Resource Management, 8(2), 96-108.
54. Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, *33*(6), 1237-1266.
55. Wiradendi Wolor, C., Solikhah, S., Fidhyallah, N. F., & Lestari, D. P. (2020). Effectiveness of e- training, e-leadership, and work life balance on employee performance during COVID-19. Journal of Asian Finance, Economics and Business, 7(10).
56. Zafar, N. (2021). The Impact Of Electronic Human Resource Management To HR Effectiveness Towards The Organizational Performance (Growing Role In Private Sector). Lahore, Pakistan: Journal of EntrepreneurshipAnd Business Venturing.
57. Zhou, Y., Cheng, Y., Zou, Y., & Liu, G. (2022). e-HRM: A meta-analysis of the antecedents, consequences, and cross-national moderators. Human resource management review, 32(4), 100862.