

# The Reality of Electronic Human Resources Management in Palestinian Authority Institutions.

Shaban Ayyat

Assistant Professor, Department of Public Administration, Faculty of Administration Sciences and Informatics, Al-Istiqlal University, Jericho – Palestine

DOI: <https://doi.org/10.47772/IJRISS.2026.1014MG0160>

Received: 24 July 2026; Accepted: 30 July 2026; Published: 05 August 2026

## ABSTRACT

Electronic Human Resource Management (E-HRM) has emerged as a strategic component of digital transformation, fundamentally reshaping how organizations manage human capital through information and communication technologies. While considerable progress has been achieved in implementing digital HR practices globally, the body of knowledge concerning E-HRM within Palestinian Authority institutions remains fragmented across different sectors and lacks an integrated analytical synthesis. Therefore, this study aims to provide a comprehensive qualitative literature review of the reality of Electronic Human Resource Management in Palestinian Authority institutions by critically synthesizing Palestinian, Arab, and international literature to examine its conceptual foundations, core functions, implementation practices, organizational benefits, implementation challenges, and emerging research directions.

The study adopts a qualitative literature review approach based on critical analysis and thematic synthesis of peer-reviewed journal articles, books, reports, and relevant academic publications in both Arabic and English. The review integrates evidence from multiple contexts to provide a comprehensive understanding of the evolution of E-HRM and its application within the Palestinian public sector.

The findings indicate that E-HRM has evolved beyond the automation of traditional HR functions into a strategic organizational capability that supports digital transformation, organizational performance, governance, workforce planning, employee development, and evidence-based decision-making. The review further reveals that Palestinian Authority institutions have made measurable progress in adopting electronic HR practices; however, implementation remains uneven due to challenges related to technological infrastructure, organizational readiness, financial resources, cybersecurity, system integration, leadership commitment, and employees' digital competencies. Moreover, the review identifies important conceptual, methodological, and contextual gaps in the existing literature, particularly regarding qualitative investigations, Human Resource Analytics, Artificial Intelligence applications, and comprehensive studies focusing on Palestinian governmental institutions.

This study contributes to the literature by providing an integrated analytical framework that consolidates fragmented evidence and advances the understanding of E-HRM within Palestinian Authority institutions. It also offers practical insights and future research directions that may support policymakers and public organizations in strengthening digital human resource management and accelerating administrative modernization.

**Keywords:** Electronic Human Resource Management; E-HRM; Digital Human Resource Management; Human Resource Information Systems; Digital Transformation; Palestinian Authority Institutions.

## INTRODUCTION

The Palestinian public sector has witnessed a qualitative shift in keeping pace with electronic developments. One of the most prominent responses to this shift has been the establishment of the Unified Access System,

which serves as the main gateway to e-government. The system allows ordinary citizens or civil servants to use government service portals and some participating entities like electricity companies, municipalities, and some non-governmental and civil society organizations (NGOs) (Ministry of Communications and Information Technology, 2023). Although tremendous strides have been made in this area, HRM in government agencies still has many issues. These issues are largely due to differences in employees' technical savvy and their different work duties, which also differ in how they are utilized in digital contexts. These differences have led to various challenges that demand ongoing adjustments and a systematic approach to addressing service needs, especially given the diversity of service requirements. The impact of this situation on work systems has been inevitable and has created a new reality which requires continued system development and system modernisation. HRM is no longer limited to tasks which are only subsidiary or supportive of the traditional functions. On the contrary, current practice demonstrates that a number of its functions and activities have developed in a definite way, and that many of these are now completely digital. However, further improvements to these developments are still needed and should continue to be evaluated on an ongoing basis. Some activities are still centered on the development of infrastructural and information management, but the hesitation or resistance of some institutions to embrace the digital environment still pose a challenge (Abdullah et al., 2021; Ayyat, 2025). Many changes in the global economy (globalisation), advances in administrative thinking and technological developments made possible by information and communication technology (ICTs), especially the Internet, are driving a rapid transformation of the concepts, policies, strategies and practices of human resource management. IT is pervading many aspects of an organization's administration. Most organizations need a database for a number of administrative needs. In today's world, database is an indispensable application in the working of any organization without which they cannot work (Abu Naser et al., 2017; Al Shobaki et al., 2017). The 21st century presents an immense challenge to the human resources management (HRM) in public and private sector, as well as shifting and evolving political and economic, social, technological and cultural dynamics (Amuna et al., 2017). Taking into account this, a new approach in management has been presented, which is known as electronic human resource management (e-HRM). It is an approach that relies on the conscious use of information and communication technologies (ICTs) to accomplish the basic tasks of HRM and to aid its development. In simple terms, e-HRM is a contemporary way of handling human resources in an era that is rapidly changing by integrating the new technologies to implement the required human resource policies and practices. With the advent of the internet and the improvement of ICT, organizations have become a necessity to embrace digital transformation. This shift has made it essential to convert paper-based processes and files into electronic ones. It has also fostered new links and connections between internal and external governments, businesses, unions, employees and customers. This development has introduced a new set of e- terms like e-management, e-business, e-HRM (Al-Najjar, 2008; Al Shobaki & Abu Naser, 2016, 2017); Amuna et al., 2017). With the development of technology, the idea of electronic human resource management (E-HRM) has become more widely accepted. It reflects the management of human resources (HR) activities and procedures with information technology (IT). The administration of pay and benefits, performance management, training and development, and recruitment are just a few of the HR procedures that are automated by E-HRM systems. (Nanayakkara, 2020). This section will explore electronic human resource management (e-HRM), and first discuss the progression of e-management. We will then discuss the basic elements and activities of e-HRM, its major advantage to create a more organized and systematic HRM and its importance. Based on the above discussion, it is clear that electronic human resource management is one of the vital aspects of the modernization of administrative affairs in the Palestinian Authority institutions. Although tangible advances have been made in the adoption of digital systems and e-government applications, the implementation of e-HRM is still imbalanced and subject to various organizational, technical and human challenges. This fact constitutes the necessity to examine in detail the current state of e-HRM, the extent to which it is used and the barriers to optimal use. In this context, this study aims to investigate the reality of electronic HRM in Palestinian Authority institutions to get a comprehensive picture that can help in improving HRM practices and in making informed decisions in public institutions.

## RESEARCH METHODOLOGY

This study adopted a qualitative literature review approach to examine the reality of Electronic Human Resource Management (EHRM) in the Palestinian Authority (PA) institutions. The literature was identified using Arabic and English keywords such as E-HRM, digital HRM, HRIS, electronic HR practices, digital

transformation, and Palestinian public institutions using the search engines Google Scholar, Scopus, Web of Science and Research Gate until 2026. The review included only academic books, postgraduate theses, peer-reviewed articles, and official reports that discussed concepts, applications, results, challenges, and the need to implement E-HRM, whereas publications that were duplicated, lacked good documentation, or were not relevant were excluded. Only sources that clearly outlined their methodology, had reliable publication sources, and were directly relevant to the study goal were considered. The selected literature was analysed critically and thematically based on the main functions, benefits, challenges and future developments of E-HRM. Palestinian evidence was then analysed with reference to the literature on Arabs and the international community to determine patterns, contextual variations, research gaps, and future possibilities.

## LITERATURE REVIEW

### • Electronic Management

#### •The Historical Development of Electronic Management Electronic

Over the last decades, communication and information technology has made significant progress, resulting in a dramatic change in the way electronic management is done. In order to facilitate and improve a variety of operations and activities within organizations as well as between them and their clients and business partners, electronic management has emerged as a crucial component of business management (Ismail, 2024). Electronic management provides quick and easy information and data access, reduced costs, fewer mistakes and improved production and efficiency. Artificial intelligence and machine learning are recent advancements in electronic management that assist organizations in improving operations and decisions that are better and more accurate. (M B, 2022).

#### • The Definition of Electronic Management

Electronic management is the process of using digital technologies, like computers and networks, to transform traditional, paper-based administrative tasks into efficient, technology-driven operations. This all-in-one solution provides a way to eliminate manual processes, increase speed, reduce costs, and enhance service quality (Djadi & Boushaba, 2021). E- Management is a great response to the challenges of globalization and the information economy. It is important because it helps to stay up to date with the evolution of information technology and systems. e-administration streamlines intergovernmental procedures by making communication easier, both within the organisation and with external actors. This streamlining does not only enhance the service to the citizens, but it also leads to better organizations performance and considerable reduction in paper usage (Al-Salmi, 2020). E-Management applies the latest technology and the web to ease the procedures of government, businesses and institutions. This involves activities such as planning, organising, implementing, monitoring and communicating with citizens, customers and partners. E-management can be applied in different fields like education, healthcare, finance and public services (Al-Sharjabi & Others, 2019; Ismail, 2024). Electronic management (e-management) is the use of electronic systems and technology to manage and operate an organization. According to Chand (2020) and Ismail (2024), this method relies on software, databases, and digital tools to automate processes, enhance decision-making, increase productivity, and reduce operational expenses. Electronic management is the use of information technology and communication skills to manage processes and activities of an organisation. This method, which involves technologies such as Web applications, cloud computing, and AI, enables fast and easy access to information and data, enhancing the efficiency and productivity of an organization (Eckhardt & Others, 2020).

#### The characteristics of E-management.

An administrative system which makes the leadership simple and flexible through means and tools of technology, saves the time and effort of many staff members, and increases the efficiency of work. E-management provides a number of unique benefits, making the way organizations run completely different: Optimized Workflow: E-management optimizes administration processes, which helps save precious time and effort. Electronic systems greatly accelerate and improve the efficiency of work that was previously done by hand. Reduced Administration Errors: These technologies reduce administrative errors, leading to more

accurate data. They can also ensure the smooth connectivity of various systems and applications within an organization, resulting in a more streamlined workflow (Nanayakkara, 2020). Easy Information Access: E-management provides easy access to information and data. The internet and digital networks do away with the need to go through the tedious process of searching for information which is required, and can be accessed at instant speeds. Effective Control and Monitoring: Electronic technologies can be used to ensure accurate and efficient control of administrative processes. This can help managers track performance and take immediate action to resolve possible issues. Better internal and external communication: E-management is very important in improving communication with external factors such as customers and partners, and within internal communication. It offers efficient and flexible communication channels, enabling quick responses to inquiries and complaints (Nanayakkara, 2020).

### **Electronic Human Resource Management (E-HRM).**

There are equivalent definitions and names to the e-HRM concept and some of the terms are used in foreign literature as e-HR or virtual HRM. Aside from HR portals (Ruel et al., 2007), others refer to it as HR intranet, Web-based HR or Computer-based HRM (CHRIS) (Ruel et al., 2007). Electronic Human Resource Management (E-HRM), is the integration of digital technologies and web-based systems in HR functions and processes. The significance of E-HRM has grown as companies aim to enhance efficiency, lower costs, and navigate the digital era (Huo & Wang, 2024; Ayyat, 2026). Electronic Human Resource Management (E-HRM) is the strategic use of technology and digital tools to manage different aspects of HRM. This means incorporating software, electronic platforms, and other digital tools to automate HR processes and boost efficiency overall (Elsawy et al., 2021). Electronic Human Resource Management (E-HRM) is the application of information technology and specialized software that is used to run human resource procedures. These encompass recruitment, onboarding, training, performance management and employee relations, among others (Kumar & Sharma, 2021; Stone et al., 2018). By applying modern methods and techniques, E-HRM systems automate HR processes and offer various services, such as online training, performance monitoring, and self-service options, which allow employees and managers to update personal information and benefits more efficiently and effectively. As organisations adopt e-business techniques to boost the flow of information and resources in HR, Electronic Human Resource Management (E-HRM) is gaining in importance (Cedar Crestone, 2005; Ruel et al., 2004). At the heart of E-HRM is the use of technology that allows managers and employees to quickly, easily and directly access HR services for communication, performance management, reporting and training (Wyatt 2001). This can be accomplished with different platforms such as intranets, extranets, mobile applications and wireless communication (Shaban, 2022). According to Zafar (2010) Digitalization in the development of human resource management in the Republic of Belarus) one quarter of the organizations found that E-HRM is of a crucial importance, while more than half believe that it is of a medium importance. E-HRM is an umbrella that casts a shadow over HR practices and therefore, it is critical that companies pay more and more attention to it. According to Swaroop (2012), E- HRM/Digital HRM is the process of carrying out HR methodologies, strategies and activities using the web-based and internet networks. Boundarouk and Ruël (2009) have indicated that there is a huge need to come up with a concept that can link HRM and IT, while still considering the importance of both employees and IT technicians. The higher number of corporations between HR and IT experts, the better these experts will perform (CedarCrestone, 2009; Zarqan, and Sukarni (2017). Wright and Dyer (2000): "E-HRM: Innovation or irritation", in an explorative empirical study in five large firms on web-based HRM, presented the following justification: E-business has been a major force and HR workers are confronted with the new challenge of getting rid of the old business. They believe that HR can be a fantastic ally of the success but HR must shift its focus, function and delivery systems. In E-business, they say, and in others, using technology for HR can't be avoided. Organizations are now turning towards effective performance of these tasks with the least time, cost and effort and with high accuracy to reduce human errors with the help of technology. E-HRM can be divided into three components, namely operational, relational and transformational (Wright & Dyer, 2000). Operational E-HRM focuses on the individuals keeping their personal data up-to-date via a website or HR system and the value of that data to the organization and to them. Relational E-HRM relates to the staff using web-based tools and a continuous manual routine processes like recruitment and selection. Transformational E-HRM consists of a suite of web-based integrated tools that guide workers towards building the organization's strategic options online. According to Radwan (2002) e-HRM is adopted under certain conditions that include:

1. Organizational commitment to develop and enhance E-HRM initiatives.
2. Strategic planning aimed at transitioning HR functions to the digital environment.
3. Effective communication plans among all stakeholders, ensuring that employees' needs and willingness are considered.
4. Focused analysis of procedures and performance, emphasizing the interdependence of service systems and the technical workload.

These are important for any organisation that aspires to adopt E-HRM (Shi, 2002) and are dependent upon the effective management of knowledge and information. These conditions will help an organization to ensure that its HRM practices are in tune with its strategic interest and the implementation of suitable rules and procedures. There are many benefits that can be drawn from the implementation of E-HRM; it can help to reduce the costs of operations, to assist HR functions and activities, and to help to fulfil the goals of the organization (Stanton & Coover, 2004; Voermans & Veldhoven, 2007). As mentioned by Ruel (2004) in his article about E-HRM: Innovation or Irritation, E-HRM can be seen as an organized technical framework which helps HR departments to do their work properly using digital technology.

Overall, E-HRM facilitates HR functions by enhancing operational efficiency, creating a more dynamic work environment, and effectively contributing to the overall effectiveness of human resource management.

### **Human Resources Management (e-HRM) Objectives.**

Electronic Human Resource Management (E-HRM) is a radical change in the way HR management is now done away from the administrative method and towards a strategic application of technology to improve organizational performance. E-HRM brings digital technologies to HR activities to enhance organizational effectiveness, decision-making and sustainable competitive advantage (SCA) contrary to the traditional HRM that is more oriented toward administrative efficiency and record keeping. One of the key goals of E-HRM is to streamline and automate repetitive administrative tasks to improve the efficiency of HR operations. Human Resource Information Systems (HRIS), cloud based systems and enterprise systems can help to streamline recruitment, payroll, attendance, leave and employee records, and help to reduce the costs of these processes as well as reduce processing time, administrative errors and paperwork (Stone et al., 2015; Marler & Fisher, 2013). In addition to its operational benefits, E-HRM helps with strategic human resource management by ensuring timely and accurate data for workforce planning and organizational decision making. By applying workforce analytics, AI, and business intelligence, organizations can make informed predictions about workforce demands, address competency gaps, track trends in performance, and make better decisions regarding their talent management practices in order to enhance HR's role as a strategic business partner (Lengnick-Hall et al., 2009; Bondarouk et al., 2017). With respect to service delivery, E-HRM enhances service quality by introducing Employee Self-Service (ESS) and Manager Self-Service (MSS) applications that allow employees and managers to process HR transactions electronically, such as change their personal details, apply for leave, access payroll information, enrol in training and complete performance evaluations. These technologies enhance efficiency, transparency, and employee satisfaction and decrease the time spent by HR staff (Ruël et al., 2007; Parry & Tyson, 2011). Moreover, E-HRM improves organizational communication, knowledge sharing, and governance by integrating digital platforms that enable organizations to work together, learn from each other, and ensure transparency, accountability, and regulatory compliance. In public sector organisations, consistency and accountability are critical and digital workflows, electronic approvals, and audit trails are especially beneficial (Stone et al., 2015; Bondarouk & Brewster, 2016). The goals of E-HRM are similar to national digital transformation and e-government programs seeking to enhance public service delivery and institutional effectiveness in Palestinian Authority institutions. But these goals can only be realized with the development of technological infrastructure, financial resources, institutional preparedness, leadership backing, legislation support, and the digital skills of employees (Ministry of Communications and Information Technology, 2023; Abu Naser et al., 2017; Al Shobaki et al., 2017). In general, the literature suggests that E-HRM is more comprehensive than the mere automation of administrative processes. It is a strategic management model which combines digital technologies and HR practices to enhance the efficiency of the organisation, employee experience, evidence-based decisions, institutional governance and sustainable digital transformation.

## **Functions of Electronic Human Resource Management (E-HRM).**

The information and communication technology has revolutionized the field of human resource management at a great pace. Electronic Human Resource Management (E-HRM) is more than just an automation of routine HR tasks; it is an HR system that incorporates technological solutions throughout the entire employee life cycle, improving the effectiveness of HR administration, decision making and improving the competitiveness of the organization (Bondarouk & Ruël, 2009; Marler & Fisher, 2013). In addition to process automation, E-HRM facilitates data-driven decision making, workforce analytics, empowerment of employees, communication inside the organization, and digital governance. Its effectiveness is therefore not only based on technological infrastructure, but also on the impact it has on HR practices, organizational performance and employee experience (Stone et al., 2015; Strohmeier, 2007). While different authors employ various terms to describe E-HRM, the essential functions tend to be grouped into electronic workforce planning, electronic recruitment and selection, electronic training and development, electronic performance management, electronic compensation and payroll administration, EHR employee self-service, EHR Human Resource Information Systems (HRIS), electronic communication, and EHR Human Resource Analytics (HRA) using artificial intelligence (AI) (Parry & Tyson, 2011; Bondarouk et al., 2017). In the Palestinian Authority institutions, the implementation of these functions has been carried out in parallel with the national digital transformation projects; however, their implementation varies based on the institutional readiness, technology infrastructure, financial resources, leadership commitment and digital skills of employees within the institutions (Ministry of Communications and Information Technology, 2023; Saaida & Ayyat, 2025). The following sections analyse these key functions, drawing on research from Palestinian, Arab and international sources, and summarising the key opportunities and challenges to implementation.

### **Electronic Human Resource Planning**

A key component of E-HRM is Electronic Human Resource Planning (e-HRP), which uses digital technologies, Human Resource Information Systems (HRIS), and workforce analytics to predict staffing requirements and inform strategic workforce planning. e-HRP offers real-time, fact-based data that allows organizations to predict the need for resources and integrate human resource planning into the long-term goals of the organization, in comparison with traditional planning (Lengnick-Hall et al., 2009; Stone et al., 2015). HRIS systems can be integrated to allow managers to access employee information, competency profiles, turnover data, and succession plans, helping to streamline workforce planning and reduce inaccuracies. The use of predictive analytics and artificial intelligence has also enhanced the capability of making workforce forecasts, providing scenarios and helping with decision making (Marler & Fisher, 2013). Research conducted internationally has proven that electronic workforce planning has beneficial consequences for organizational agility, workforce allocation and HR policy and organizational strategy alignment (Bondarouk & Ruël, 2009; Parry & Tyson, 2011). But the experience of Arab public institutions shows that it is not uniformly used due to the inability of the information systems, the lack of quality data, and the differences in the institutional readiness. E-government efforts in Palestine have developed opportunities to enhance electronic workforce planning by using electronic administration platforms. However, the fragmented HR databases, lack of interoperability, the scarcity of Digital HR skills, and financial constraints are still a problem for many public institutions which hinders the complete integration of workforce planning into strategic decision making (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023). Put simply, electronic workforce planning is no longer a record-keeping application, but a strategic decision support tool to improve workforce planning and organizational readiness. Integrated HR information system and digitalization continue to be critical to promote strategic workforce planning in Palestinian Authority institutions.

### **Electronic Recruitment (E-Recruitment).**

One of the earliest and most popular applications of Electronic Human Resource Management (E-HRM) is electronic recruitment (e-recruitment). It is the application of Internet and digital platforms to recruit, communicate and attract prospective workers. In contrast to traditional recruitment approach, e-recruitment uses recruitment management system, organizational websites, online job portals and social media to facilitate recruitment processes, improve access to qualified applicants, and lower the recruitment expense and

processing time (Chapman & Webster, 2003; Parry & Tyson, 2008). The digitization of recruitment has revolutionized talent acquisition, utilizing Applicant Tracking Systems (ATS), electronic job portals and professional networking sites like LinkedIn. These technologies enable application management, automatic screening, automatic communication with candidates and recruitment performance monitoring. More recently, AI and machine learning have taken the recruitment process a step further, allowing automated résumé screening and matching, and predicting the suitability of candidates. Researchers warn, however, that if there are no checks and balances in place, AI-driven recruitment could create issues related to algorithmic bias, data privacy, and ethical decision-making (Stone et al., 2015; Bondarouk & Ruël, 2009; Marler & Boudreau, 2017; Vrontis et al., 2022; Ayyat & Bassam). It is clear from the international evidence that e-recruitment enhances the efficiency within an organisation, speeds up recruitment time, saves administration time, opens up recruitment to better candidates, and boosts employer branding. However, it relies on the technological readiness of the organization, HR professionals' digital skills and the quality of online recruitment strategies (Parry & Tyson, 2008; Stone et al. 2015). In the Arab region, the use of electronic recruitment has been expanding to play an important role in the digital transformation of the public sector, leading to increased transparency and standardized recruitment processes. However, the implementation of the program is not going well, as the technological infrastructure is not fully developed, there are legal hurdles, and digital competency and organizational reluctance are a problem. The current trend in Palestine has seen the spread of electronic recruitment by e-government initiatives and many government institutions using their official Web sites and electronic employment portals to post job openings. However, these advances in recruitment have not yet led to a comprehensive digitalization of recruitment practices, as HR information systems are still fragmented, technological infrastructure is not uniform, financial resources are limited, and institutions are not ready. Notwithstanding these developments, the recruitment practices are partly not yet digitalized because of fragmented HR information systems, inconsistent technological infrastructure, limited financial resources and varying degrees of institutional readiness (Abu Naser et al., 2017; Ayyat & Bassam, 2025; Ministry of Communications and Information Technology, 2023). In summary, e-recruitment has transitioned from being a digital recruitment tool into a more strategic role in talent acquisition that increases efficiency, transparency, and recruitment quality. For the Palestinian Authority institutions, enhancing integrated recruitment systems, digital infrastructure, and HR professionals' technological skills are key to realizing efficient and fair recruitment practices.

### **Electronic Selection and Hiring.**

Electronic selection and hiring (e-selection) is one of the main tasks of Electronic Human Resource Management (E-HRM) that utilizes digital technology to evaluate applicants, facilitate hiring decision-making and to enable the onboarding of employees. The e-selection combines the use of web-based technology, online assessment, Artificial Intelligence (AI), and Human Resource Information Systems (HRIS) to enhance the efficiency, consistency, and quality of the hiring process (Stone & Dulebohn, 2013, Strohmeier, 2007). With the advancement of technology, online applications, electronic tests, virtual interviews, and automated communication can be facilitated via modern E-HRM systems. Simultaneously, HR professionals can track applicant progress, compare candidates' profiles to one another, create standardised evaluation reports and record the hiring decision in a digital platform, enhancing the consistency of the procedure and minimizing administrative load (Parry & Tyson, 2011; Bondarouk & Ruël, 2009). The developments in electronic selection in recent years have been further enhanced by the use of artificial intelligence in the screening of resumes, competency matching, predictive evaluation and candidate ranking. Although these technologies improve efficiency and scalability, researchers have called for the need to rely on human judgment more than automated decision making, as too much of the latter can raise concerns about bias, transparency, accountability, and data privacy. Recent studies reveal that electronic selection can accelerate hiring time, decrease recruitment expenses, ensure consistency in the hiring process, and increase the number of applicants who can participate remotely. But when organizations do not provide an explanation about how digital technology affects a hiring decision, applicants are prone to viewing the AI-assisted selection as unfair, presenting a dilemma between efficiency and procedural justice and transparency. In the Arab region, the use of electronic selection has grown as part of the digital transformation of public sector with online selections, electronic examinations, and virtual interviews. However, digital implementation is still fragmented due to insufficient digital infrastructure, technical capacity, policy enabling elements, and organizational preparedness. In Palestine, electronic recruitment has expanded alongside e-government initiatives, with many governmental institutions advertising

vacancies through official websites and electronic employment portals. Despite these developments, recruitment practices remain only partially digitalized due to fragmented HR information systems, inconsistent technological infrastructure, financial constraints, and varying levels of institutional readiness (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023).

Overall, e-recruitment has evolved from a digital recruitment tool into a strategic talent acquisition function that enhances efficiency, transparency, and recruitment quality. For Palestinian Authority institutions, strengthening integrated recruitment systems, digital infrastructure, and HR professionals' technological competencies remains essential for achieving more effective and equitable recruitment practices.

### **Electronic Training and Development.**

Electronic Training and Development (e-training and e-development) is one of the fundamental activities of Electronic Human Resource Management (E-HRM) that involves the use of digital technologies in the organization's learning and continuous professional development. Unlike classroom training, electronic training uses Learning Management Systems (LMS), e-learning platforms, virtual classrooms, webinars, mobile learning applications and artificial intelligence (AI) to allow flexible, accessible and ongoing learning opportunities (Stone et al., 2015; Noe et al., 2023). Modern E-HRM can empower companies to create, deploy, and assess training initiatives using a unified digital platform. Through course registration, content delivery, training competency assessment, training certification management, and training status monitoring in real time, LMS helps HR departments synchronize training activities with organizational training goals and workforce competency needs (Noe et al., 2023; Bondarouk & Brewster, 2016). The recent advancements in AI technology have also added another layer to the already great electronic training with the help of customised learning tracks and paths that focus on the skills and learning needs of employees. AI-powered systems can detect skill deficiencies, suggest targeted training, and offer ongoing feedback, which boosts learning efficacy and aids in organization adaptability in changing work scenarios (Minbaeva, 2021; Vrontis et al., 2022). Throughout, the literature points to the fact that electronic training leads to lower training costs, greater accessibility and flexibility to learning, a standardized learning content, and better assessment of learning outcomes using electronic tools and digital analytics. The effectiveness of its use, however, relies on technological infrastructure, digital competencies of employees, leadership support, a learning culture within the organization, and quality instructional design (Noe et al., 2023; Stone et al., 2015; Bondarouk & Brewster, 2016). In the Arab region, electronic training is one of the key elements of public sector modernization, allowing governmental institutions to enhance capabilities and to use digital training platforms. However, the successful implementation of e-training initiatives remains affected by differences in the digital infrastructure, financial resources, institutional readiness and expertise. Employee training has become an integral component of the broader e-government and public administration modernization programs in Palestine, increasingly including online workshops and virtual seminars and digital learning platforms. Despite all these developments, the adoption of integrated electronic training systems still has uneven progress due to technical constraints, financial limitations, lack of specialized digital skills and uneven institutional investment (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023). Overall, e-training and development have become a strategic tool for learning and development of human resources in the organization constantly. Supporting digital learning infrastructure, digital competencies of employees and continuous electronic learning within Palestinian Authority institutions are still critical in order to increase the organization's performance and support the digital transformation process in the Palestinian Authority.

### **Electronic Performance Management and Appraisal**

Electronic Performance Management and Appraisal (e-performance management) is one of the main activities of Electronic Human Resource Management (E-HRM) which is an alternative to the traditional paper-based performance evaluation systems by providing continuous performance management through technology. The combination of Human Resource Information Systems (HRIS), digital dashboards, Key Performance Indicators (KPIs), cloud-based platforms, and performance analytics enables organizations to track employee performance, offer timely feedback, and facilitate evidence-based decision-making, thereby enhancing overall HR analytics capabilities (Aguinis, 2023; Stone et al., 2015). Modern E-HRM systems allow managers to set

up the measurable performance metrics, track employee progress, record the employee's accomplishments, create automated performance reports and provide regular feedback to the employees based on their performance, not just once a year. These features increase transparency, enhance the communication between supervisors and employees, and ensure that each employee's work relates to organizational goals (Aguinis, 2023; Bondarouk & Brewster, 2016). With the advancements in data analytics and Artificial Intelligence, the electronic performance management has further become improved as organizations can make use of the data to find out trends in performance, gaps in competency and predict what they should be predicting and then helping an employee to develop accordingly, plan for promotion and succession planning. In fact, these technologies enhance the objective and regularity of the performance assessment, but researchers stress it should be used in addition to managerial judgment (Marler & Boudreau, 2017; Vrontis et al., 2022). Research on electronic performance management around the world has repeatedly shown that it improves the accuracy of assessment, employee engagement, continuous feedback and organizational effectiveness. But the effective implementation requires more than just technological capacity; it also requires leadership commitment, an objective set of assessment criteria, trust in the organization, and acceptance among employees. Additionally, the privacy and data security concerns, algorithm bias, and over-monitored students underscore the need to be technologically innovative yet equitable and ethical in governance (Aguinis, 2023; Stone et al., 2015). Electronic performance management is now playing an important role in government modernization in the Arab region as several governmental bodies have adopted the digitalization of their appraisal systems and their integration with strategic planning and institutional performance measurement. However, implementation varies due to different technological infrastructure, management skills, organizational cultures and regulations. In Palestine, electronic systems for attendance management, documenting performance and administrative reporting have been embraced as part of governmental reform programs. However, the use of a fully integrated EPM system is not at the same level due to technical, financial, leadership, digital competencies and organizational readiness (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023). The general impact of electronic performance management is that it has become a strategic instrument to enhance organizational effectiveness and aid in evidence-based HR decision making. It is critical for the PA institutions to continue strengthening their integrated digital performance systems, as well as to foster transparency, employee participation and organizational preparedness, to achieve accountability and institutional performance in the PA.

### **Electronic Compensation, Payroll, and Rewards.**

Electronic Compensation, Payroll and Rewards is one of the critical areas of Electronic Human Resource Management (E-HRM) which involves using embedded digital technologies to manage employee salaries, benefits, and reward systems. As opposed to the traditional payroll administration based on manual calculations and paper-based records, electronic compensation systems incorporate Human Resource Information Systems (HRIS), Enterprise Resource Planning (ERP), and financial management platforms to boost effectiveness, precision and clearness. (Stone et al., 2015; Bondarouk & Brewster, 2016). Modern payroll software systems automate salary computation, tax deductions and allowances, overtime, employee benefits, social security and more, and also help companies adhere to legal requirements and organizational policy. They are also responsible for giving employees secure access to their own electronic payslips, payroll and benefits information, which helps to streamline administrative tasks and enhance service (Parry & Tyson, 2011). In addition to payroll processing, modern E-HRM systems enable strategic compensation management by seamlessly connecting payroll information with performance, workforce analytics, and budgeting. This allows HR managers to measure compensation equity, track labor costs, measure reward effectiveness, and set compensation strategies to meet organisational goals with real time information: Marler & Fisher (2013); Stone et al (2015). The rise of cloud computing, mobile applications, and AI has added another layer to compensation management, with these tools now performing tasks such as automated anomaly detection, financial forecasting and personal digital payroll services. (Vrontis et al., 2022) However, although these benefits are there, compensation management still faces challenges as payroll information is a highly sensitive organizational data. This means that robust cybersecurity, data privacy protection, system integration, technical knowledge, and ongoing maintenance are essential for secure and reliable payroll operations (Stone et al., 2015). Governments in the Arab region have also increasingly introduced electronic tools for payroll administration, as part of efforts to digitize public financial management and government more broadly, to enhance the efficiency, transparency and financial accountability of governments. However, disjointed

information systems and lack of interoperability, cyber security issues and differing levels of organizational readiness continue to hinder implementation. In Palestine, electronic payroll management has been growing and developing in tandem with the government's initiatives to modernize administrative and financial systems. While a few PA institutions have implemented the use of computers for payroll applications and electronic financial management systems, the integration of these systems with wider HR information systems has not been consistent, due to financial constraints, technological infrastructure, cyber security needs and differences in institutional digital readiness (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023). In general, electronic compensation, payroll, and rewards have transformed from payroll administration to E-HRM strategic elements to increase the financial transparency, provide better evidence-based compensation decisions, and service to employees. Integrating payroll systems with HRIS and national digital government programs is still necessary to further improve the governance of Palestinian Authority institutions and progress E-HRM in the PA.

### **Employee Self-Service (ESS) and Manager Self-Service (MSS)**

Two crucial elements of Electronic Human Resource Management (E-HRM) are Employee Self-Service (ESS) and Manager Self-Service (MSS), which allow employees and managers to complete basic HR functions using secure Web-based applications, mobile apps and Human Resource Information Systems (HRIS). The technologies decrease the dependency on HR departments and increase the efficiency of an organization and the quality of services provided (Ruël et al., 2007; Stone et al., 2015). In contrast to paper-based systems, ESS and MSS enable employees to make leave requests, update personal details, access payroll data, enroll in training courses, view performance reviews, and track benefits electronically. Managers can also approve requests, track attendance, view workforce information, review employee performance, and create HR reports through one of the integrated digital platforms, thus minimizing administrative burden and speeding up the decision making process (Parry & Tyson, 2011; Bondarouk & Brewster, 2016). In addition to administrative automation, ESS and MSS expand the strategic view of HR by shifting simple operational tasks to employees and line managers so HR can concentrate on workforce planning, talent management, organizational development and strategic policy implementation (Marler & Fisher, 2013). Studies also suggest that SST can contribute to the minimization of administrative expenses, better data quality, employee productivity, communication among employees, supervisors, and human resources departments (Stone et al., 2015). But, employee digital skills, acceptance by the users, usability of the system, security, and trust within the organization are key factors in its successful implementation. Although self-service applications are available, limited digital literacy, concerns about information privacy, and lack of technological infrastructure can limit their effectiveness (Bondarouk & Ruël, 2009). In the Arab region, ESS and MSS are gaining traction in public sector digital transformation projects, helping to improve employee attendance tracking, electronic approvals, and employee service portals. However, there are variations in implementation across organisations due to different technological infrastructure, institutional readiness and investment in digital transformation. In Palestine, the use of employee self-service applications has been slowly growing and has been a part of governmental administrative modernization. There are electronic systems in place for taking attendance, leave applications, payroll inquiries, and internal administration at several Palestinian Authority institutions. Minimal interoperability, financial limitations, technological infrastructure and varying digital competencies of employees, however, hindered the full integration of ESS and MSS platforms (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023; Ayyat, 2021). Overall, ESS and MSS have progressed beyond mere administrative support to become strategic instruments which increase employee empowerment, managerial decision making, organisation transparency and HR service delivery efficiency. The further expansion of integrated self-service platforms and the enhancement of employees' digital skills are still crucial to support the advancement of E-HRM implementation in PA institutions.

### **Electronic Employee Records and Human Resource Information Systems (HRIS).**

E-HRM is built technologically by Electronic Employee Record and Electronic Human Resource Information System (HRIS). HRIS are digital systems designed to gather, store, process and control employee information during the entire employee life cycle. HRIS stores workforce information in secure electronic databases, as opposed to paper-based files, and allows for the timely and accurate delivery of information that helps human

resource managers make informed decisions regarding workforce management (Kovach et al., 2002; Hendrickson, 2003). The replacement of the paper-based personnel records with the electronic employee records has helped to improve information management in the organization. Modern HRIS brings together employee information such as basic details, workplace history, skills, training, attendance, payroll, performance reviews, promotions and retirement details in a single system, minimizing data duplication, eliminating errors and enabling quick access to employee information (Stone et al., 2015). In addition to record keeping, HRIS has also become a strategic decision support tool that delivers up-to-the-minute information about the workforce, analytical reports, and performance indicators that guide workforce planning, succession management, competency mapping, budget planning and organizational performance. When integrating with Enterprise Resource Planning (ERP) systems, HR is better coordinated with other organizational functions (Marler & Fisher, 2013; Bondarouk & Brewster, 2016). Today, HRIS capabilities have been enhanced due to the recent developments in cloud computing and mobile technology, which have allowed HRIS to be accessed remotely, be scalable, and have lower infrastructure costs. But the digitalisation of HR records poses greater importance on cyber security, data privacy, governance and regulatory compliance, and organisations need to have strong authentication systems, encryption and access control in place to ensure that information regarding employees is secure (Stone et al., 2015). HRIS is consistently cited as one of the key factors that contribute to the successful implementation of E-HRM. Companies with HRIS tend to experience improved administrative efficiency, data quality, strategic decision making and HR effectiveness. However, it requires technological infrastructure, system integration, employee training, leadership commitment, and continual system maintenance (Parry & Tyson, 2011). The adoption of HRIS has grown in the Arab region, through public sector digital transformation and digital governance programs. A number of government agencies have been using central employee databases and HR systems, but the implementation still has a number of hurdles to overcome due to budget constraints, interoperability issues, technical skills and digital maturity of agencies. The use of electronic employee records and HRIS has advanced in Palestine, in parallel to the national e-government programs and the digital transformation of the public sector. The Palestinian Authority (PA) has implemented many computerized personnel databases and electronic HR systems to promote better record-keeping and administrative efficiency of its employees. Nevertheless, the lack of interoperability between ministries, the absence of specialized technical human resources, financial limitations, and the need for cybersecurity are still affecting the HRIS functioning as full-throttled strategic decision-support systems (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023). In total, HRIS has shifted its status from a mere repository of employee records to a strategic resource for an organization to utilize for evidence-based decision making, institutional coordination and digital transformation. In the case of Palestinian Authority institutions, infrastructure for integrated HRIS, cyber security, Data Governance and interoperability continue to be vital to achieve E-HRM maturity and enhance Public Sector Human Resource Management (PSHRM).

### **Electronic Communication in Human Resource Management.**

Electronic communication is one of the basic aspects of Electronic Human Resource Management (E-HRM), where organizations can connect with each other and share information related to HR activities using digital platforms, web applications, enterprise communications, mobile devices and collaborative technology. Electronic communication offers more accessible, more transparent, faster channels of communication for providing HR services and organizational information, than conventional means (Stone et al., 2015; Bondarouk & Brewster, 2016). Modern E-HRM systems link HR portals, company intranets, mobile applications, enterprise social networks and collaboration tools to share information, policies, announcements, training, and administrative functions in real-time. Collaborative technologies like Microsoft Teams, Zoom, and Google Workspace enable virtual meetings, online interviews, and digital onboarding, as well as remote training and employee collaboration, no matter where they're located. Since the outbreak of COVID-19, their significance has grown tremendously as the adoption of the digital workplace has surged in all parts of the world (Parry & Tyson, 2011; Waizenegger et al., 2020; Noe et al., 2023). In addition to the benefits of information sharing, electronic communication enhances employee engagement and organizational commitment, by enabling two-way communication, employee feedback, surveys and direct contact with managers and HR staff. These features increase transparency, aid in the sharing of knowledge, better enlistment of HR and line management, and better consistency in the application of HR policies (Stone et al., 2015). However, factors as technological infrastructure, organizational culture, leadership support, digital competencies and communication strategies

play a crucial role in enabling effective electronic communication. The information overload, digital fatigue, information security, information privacy, and equitable access to information technologies are other issues that need to be addressed by organizations (Bondarouk & Brewster, 2016). Public sector digital transformation in the Arab region is being driven by electronic communication, such as digital portals, internal communication systems and mobile applications that are enhancing administrative coordination and services. The implementation is, however, different based on the technological infrastructure, institutional readiness and employee's digital capacity. The use of electronic communication technologies in governmental institutions in Palestine, via official portals, internal communication systems and through electronic administrative correspondence, has been growing as part of the overall implementation of e-government. However, the impact of the differences in technological infrastructure, system integration, financial resources, and readiness of Palestinian Authority institutions to use electronic communication remains (Abu Naser et al., 2017; Al Shobaki et al., 2017; Ministry of Communications and Information Technology, 2023). In sum, electronic communication has changed from a digital mode of information transmission to a powerful capacity for an organisation to work together, engage employees, share knowledge and respond to its environment. Enhancing integrated communication platforms and the digital skills of employees is still vital to achieving the best impact of E-HRM in the Palestinian Authority institutions.

### **Human Resource Analytics and Artificial Intelligence.**

Human Resource Analytics (HR Analytics) and Artificial Intelligence (AI) are the most advanced level of the progression of Electronic Human Resource Management (E-HRM). Organizations are increasingly using evidence-based workforce data and intelligent technologies to assist with workforce planning, talent management, employee engagement, and strategic decision-making, in addition to relying on administrative information and managerial experience (Ayyat & Bassam, 2025; Marler & Boudreau, 2017; Davenport et al., 2020). HR Analytics is the process of systematically gathering, combining and analyzing all workforce information from recruitment, performance management, compensation, training, attendance and employee engagement systems. These analytical skills help organizations know how to predict workforce trends, plan for staffing requirements, analyze HR interventions, and improve organizational effectiveness, making HR professionals more strategic business decision makers instead of administrative record keepers (Marler & Boudreau, 2017). E-HRM has also been enhanced by the use of Artificial Intelligence, which has brought in the concepts of machine learning, predictive analytics, natural language processing, and intelligent automation. AI-powered tools enhance the efficiency, uniformity, and precision of HR choices, such as in the screening of resumes, forecasting employee turnover, determining competencies, suggesting personalized learning tools, optimizing workforce scheduling, and succession planning (Tambe et al., 2019; Vrontis et al., 2022). Furthermore, predictive analytics can help businesses predict staffing issues like talent scarcity, staffing attrition, and future leadership needs, enabling HR to take a proactive and strategic stance (Davenport et al., 2020). While all these benefits exist, there are also several ethical and organizational issues to consider in the era of HR Analytics and AI. Algorithmic bias, employee privacy, data protection, transparency, accountability, and explain ability are still vital concerns, with researchers articulating the need for AI to support, rather than supplant, human decision-making in the context of recruitment, promotion, performance reviews and employee development (Tambe et al., 2019; Vrontis et al., 2022; Ayyat & Bassam, 2025). Studies have shown that HR Analytics and AI bring benefits to businesses, such as better decision-making, higher productivity, more effective talent management, and increased agility. In fact, international research has found that organisations that embrace HR Analytics and AI experience benefits, including enhanced decision-making, improved productivity of their workforce, efficient talent management and agility. But, it requires HR information systems, quality data, technology systems, analytical skills, leadership to buy in, and workers to trust data-driven decisions (Marler & Boudreau, 2017). In the Arab region, HR Analytics and AI are still in their infancy, especially in government organizations. While governments have been pushing the digital transformation agenda, organizations are still caught up in automating HR administrative tasks instead of leveraging the potential of workforce analytics due to the lack of analytical capabilities, a lack of integrated information systems, budget considerations, and the ever-changing nature of regulations. HR Analytics and AI in public sector HRM are still in their infancy in Palestine. Governmental institutions have taken steps to computerize HR administration using electronic databases and e-government initiatives but the use of predictive analytics and decision making based on AI is still restricted due to technological infrastructure

constraints, lack of analytical expertise, financial constraints, and the lack of HR information systems fully integrated in the HR administration process (Ayyat & Bassam; 2025; Abu Naser et al., 2017; Ministry of Communications and Information Technology, 2023; Al Shobaki et al., 2017). In conclusion, HR Analytics and AI have revolutionized E-HRM from a mere information system to a strategic tool that can drive evidence-based decision-making, predictive workforce planning, and intelligent talent management. Improving analytical skills, adopting an integrated HR information system, enhancing digital skills, and establishing AI governance mechanisms are still crucial for the progress of E-HRM applications in PA institutions.

## **ELECTRONIC HUMAN RESOURCE MANAGEMENT IN PALESTINIAN AUTHORITY INSTITUTIONS**

Gone through a progressive evolution, alongside the government's work to modernize public administration and to promote digital transformation. Like many developing states, public institutions in Palestine are increasingly aware of both the potential of digital technologies to increase administrative efficiency, improve the quality of services, increase transparency, and increase evidence-based human resource management, as well as the need to develop these capabilities. Yet, implementation is still uneven due to financial constraints, technological limitations, organizational readiness, as well as the complex political and administrative background (Saleh, 2014; Saleh & Saleh, 2016). Initial studies of Palestine were mainly on organizational readiness and technology acceptance. According to Saleh (2014), the acceptance of the E-HRM systems is significantly affected by perceived usefulness, ease of use, organizational support, and technological infrastructure, therefore, the implementation of these systems is needed to be supported by both technological investment and managerial commitment. On a broader scale, Saleh and Saleh (2016) found that Palestinian organizations have used electronic HR practices in their personnel records, recruitment, and communication and administration of payroll. However, the situation of information systems being unnecessarily siloed, restricted budgets, technological limitations and the unwillingness to change the organization remained as obstacles to the shift from administrative to strategic E-HRM implementation. Later studies focused on HEIs that have been leading the way in digital transformation. According to Abu Naser et al. (2017), Palestinian universities have reached moderate levels of implementation of E-HRM, especially in the areas of electronic communication, personnel database and administrative services, as well as emphasizing the difficulties facing them in terms of technological infrastructure, financial support, implementation of the system and strategic planning. Recent literature has been asserting the strategic importance of E-HRM more and more. Herzallah and Ayyash (2024) showed that E-HRM practices have a significant positive impact on organizational performance through an improvement in the efficiency of operations, managerial decisions, service quality, and institutional efficiency. Likewise, Shaban (2022) found that the use of electronic recruitment, electronic training, performance management and electronic communication positively affect employee performance, productivity, and organizational responsiveness, which further validates that E-HRM is able to yield both operational and organizational strategic outcomes. Other studies on Palestinian issues have focused on certain aspects of EHRM. Generally, Abed & Asmar (2022) concluded that the perceptions of electronic recruitment were positive due to its ease of use, transparency and accessibility, but with concerns about fairness, technical reliability and communication in the recruitment process. Similarly, Al-Soufi and Salama (2021) found that for the successful implementation of E-HRM in the pharmaceutical companies in Palestine, technological infrastructure, employee training, organizational support, and leadership commitment are crucial. Long-term implementation challenges are also a theme that has been emphasized in the research. Al-Alam (2018), in his study of the Palestinian Ministry of Health, outlined the technological limitations, financial constraints, lack of employee training, organizational resistance to change, and lack of strategic planning as major obstacles. A similar study was conducted by Hallou, who highlighted three aspects that were important for strengthening the implementation of E-HRM: administrative empowerment, integrated HR systems and institutional support. Most recently, Ghoneimat (2024) showed that E-HRM has the potential to enhance the principles of good governance in Palestinian public institutions in terms of transparency, accountability, procedural standardization and administrative integrity. The results indicate that E-HRM is not just a technological solution but also a governance tool that facilitates the improvement of public sector systems. In general, the Palestinian literature is characterized by a gradual shift from studies that focus on barriers to technology acceptance and implementation to studies that focus on the strategic role of E-HRM in enhancing the organizational performance, employee effectiveness, governance and institutional modernization. However,

HRIS integration challenges, digital infrastructure, cybersecurity, professional development, and strategic leadership remain key obstacles to implementation maturity. Thus, the need to advance E-HRM in Palestinian Authority institutions lies more in the need to go beyond the administrative automation of HRM to an integrated digital HR ecosystem that enables strategic management of the workforce and evidence-based decision making.

## CRITICAL REVIEW AND SYNTHESIS OF PREVIOUS LITERATURE

### Palestinian Studies

The research on Electronic Human Resource Management (E-HRM) in Palestine has increased significantly in the last ten years, as interest in Electronic HRM (E-HRM) has increased in all public institutions, higher education institutions, and the private sector. The literature shows that the focus of the studies has made a logical shift from early research that focused on technology adoption and implementation issues to research on the strategic role of E-HRM and its impact on organizational performance, governance and institutional modernization. Initial research was conducted mainly in the area of technology acceptance and organizational readiness. While the latter aspects are more related to the technology, Saleh (2014) proved that perceived usefulness, ease of use, organizational support and technological readiness had significant impact on the acceptance of E-HRM systems, which means that the implementation of successful E-HRM systems requires investment in technology and commitment on the part of the organization. Likewise, Saleh and Saleh (2016) concluded that Palestinian organizations were using electronic HR applications for personnel administration and communication, and employee record keeping, but the use of these applications was limited due to financial constraints, lack of information systems coherence, insufficient technological infrastructure and organizational change resistance. All of these studies indicate that E-HRM in Palestine is still mainly operational and not a strategic matter. Research went on to focus on higher education institutions, with a higher level of digital readiness. Abu Naser et al. (2017) found that E-HRM implementation in Palestinian universities was of moderate level, with the most evident implementation in electronic communication and personnel databases, and that infrastructure, strategic planning, financial resources and integration of E-HRM systems remained as challenges in the implementation process. Post-2020, Palestinian research started to focus more on organizational outcomes of E-HRM. Shaban (2022) found that electronic HR practices increase employee performance because it makes HR processes more efficient, communication more effective and it develops employees. Similarly, Herzallah and Ayyash (2024) discovered that the E-HRM has positive impacts on organizational performance, as it enhances managerial efficiency, agility of the organization, and competitiveness of the institution. This change is largely driven by the understanding of E-HRM as a strategic capability of an organization and not just an administrative tool. Other studies focused on particular aspects of E-HRM and implementation needs. Overall findings in the studies conducted by Abed and Asmar (2022) show a positive attitude towards electronic recruitment, but with some concerns about fairness, technical reliability, and communication quality. Likewise, Al-Soufi and Salama (2021) stated that supportive technological infrastructure, employee training, leadership commitment and organizational support are critical to the success of implementing E-HRM. The challenges of implementing the development in Palestinian public sector have been documented throughout the key highlights of the research. Technology problems, financial issues, the lack of training and resistance to change were among the significant challenges noted by Al-Alam (2018) in the Ministry of Health. Hallou also highlighted the significance of administrative empowerment, HR information systems that are integrated and institutional support in improving the implementation of E-HRM. Ghoneimat (2024) has recently shown that beyond the direct benefits for HRM, E-HRM contributes to the improvement of governance through greater transparency, accountability, procedural standardisation and administrative integrity, connecting digital HRM practices and broader public sector reform. In conclusion, the Palestinian literature shows significant advances from technology acceptance to strategic organizational outcomes. There are still some significant gaps, however. Most of the existing studies are limited to universities and selected organizations, and evidence from Palestinian Authority ministries and central governmental institutions is limited. Furthermore, most of the studies are quantitative in nature and few qualitative studies can account for the process of implementation and the leaders' opinion, organizational experiences, and contextual issues. The limitations emphasize the need for further qualitative study and literature reviews to gain more insight about the implementation of E-HRM in Palestinian Authority's institutions.

## Arab Studies.

In the Arab region, the Electronic Human Resource Management (E-HRM) is gaining popularity due to the government's desire to promote digitalization, modernize public administration, and increase the efficiency of organizations. While there is a wide-range of maturity in digitalization in the Arab world, the literature shows that E-HRM has matured from an administrative automation tool to a strategic institutional capacity that supports institutional performance and sustainable development. Early research on E-HRM in the Arab context concentrated on the determinants of E-HRM adoption, where technological infrastructure, leadership support, organizational readiness, employee digital competencies, financial resources, and effective change management were the main factors which affect the successful adoption of the E-HRM. At this phase, E-HRM was seen mostly as a way to replace HR manual processes with a systems approach to better handle the administration and lower operating expenses. With the spread of digital transformation projects across the region, the focus of research started to move towards the organizational effects of E-HRM. Empirical studies have consistently confirmed that the implementation of electronic recruitment, electronic training, Electronic Performance Management (EPM), Human Resource Information Systems (HRIS) and Employee-Self Service Technologies (ESS) increase the productivity of employees, improve the efficiency of the organization, improve service quality, promote knowledge sharing and intensify the competitiveness of the institution. Organizations which are using integrated E-HRM systems also show more flexibility, transparency and responsiveness than those who are using traditional HRM practices. In the context of higher education, Thabet and Al-Shawa (2022) identified that the implementation of E-HRM has a positive impact on the performance of the organization. This improvement is achieved through better communication, effectiveness in administration, services to employees, and management decision making. Similarly, Al-Soufi and Salama (2021) found that technical readiness, organizational commitment, leadership support and ongoing employees' training are crucial for successful E-HRM implementation, which again proves that organizational issues play a greater role than technology does. E-HRM has been linked more and more recently to other concepts in organizational literature, such as digital governance, institutional sustainability, organizational innovation, organizational resilience, and strategic human resource management. Proponents of integrated digital HR systems claim they improve transparency and accountability, standardize procedures, and facilitate evidence-based decision-making as well as national digital transformation strategies. Although these developments have been achieved, the literature pinpoints several persistent implementation issues, such as limited financial resources, disjointed information systems, cyber security issues, lack of interoperability, organizational change resistance, lack of specific digital skills, and gaps in technological infrastructure among Arab countries. This results in a wide variation in the extent and the level of maturity of E-HRM implementation in the region. In terms of methodology, Arabic studies are mostly based on a quantitative survey methodology, while relatively few studies involve a qualitative approach to explore organizational culture, leadership views, implementation processes or institutional contexts. Moreover, the studies are limited to the private sector and universities, with ministries and the central public administration institutions being comparatively unexplored. The results of Arab research are similar to those of Palestinian research and include the following success factors: technological infrastructure, organizational readiness, competence of employees and leadership commitment. Palestinian studies, on the other hand, tend to focus on issues stemming from political instability, financial limitations and institutional fragmentation, while research in the Gulf Cooperation Council (GCC) countries tends to reflect better technological infrastructure and more government investment in digital transformation. These differences demonstrate that successful E-HRM implementation depends not only on technology but also on the broader institutional, economic, and political environment.

Overall, the Arab literature confirms that E-HRM has become an integral component of organizational digital transformation throughout the region. Nevertheless, future research should place greater emphasis on strategic integration, HR Analytics, Artificial Intelligence, digital governance, and the organizational dynamics shaping E-HRM implementation within public administration.

## International Studies.

During the last 40 years, the scholarship related to Electronic Human Resource Management (E-HRM) has grown significantly internationally, moving from a narrow focus on administrative automation to a broad and multidisciplinary research area that includes the question of digital transformation, strategic human resource

management, Artificial Intelligence (AI), workforce analytics, and organizational performance. E-HRM is consistently acknowledged in the literature as a strategic capability providing companies with the means to manage the human resource more efficiently and to contribute to the long-term organizational competitiveness (Bondarouk et al., 2017; Strohmeier, 2007). Initial international research focused on automating repetitive HR activities like payroll, employee records, attendance and personnel records. At the time, E-HRM was mostly seen as a tool for information technology to enhance efficiency in administration, mitigate paperwork, cut down on operating expenses and speed up HR service delivery (Strohmeier, 2007; van Geffen et al., 2013). With the development of the digital technologies, research started to emphasize the strategic role of E-HRM. Research in the 2000s and early 2010s showed that way from operational automation to transformative Human Resource Management (HRM) has emerged from the use of integrated digital HR systems, which support HR management, workforce planning, talent management, organization communication, employee development, managerial decision making, and organization agility (Bondarouk et al., 2017; van Geffen et al., 2013). Bondarouk, Parry, and Furtmueller (2017) proposed a framework, termed the Technology–Organization–People (TOP) framework, which synthesized four decades of E-HRM research. Their review found outcomes of E-HRM to consist of operational, relational, and transformational dimensions, highlighting that above and beyond technology, there is a need for organizational readiness, leadership commitment, employee capabilities, and institutional support. The literature review reveals significant international research findings, such as the benefits of integrated E-HRM systems in increasing administrative efficiency, employee satisfaction, organizational flexibility, communication effectiveness, service level, and evidence-based decision-making. But the advantages are greatly affected by organizational culture, digital maturity, leadership support, change management, and digital skills of the employees, which shows that technological investments are not enough for strategic change (Bondarouk, Harms, & Lepak, 2017; Zhou et al., 2022). Human Resource Analytics, Artificial Intelligence, cloud computing and intelligent decision-support systems are key areas of increased focus in recent scholarship. This can be used in AI-powered applications for predictive workforce planning, turnover prediction, recruitment optimization, and personalized learning, among others. Meanwhile, ethical issues such as algorithmic bias, employee privacy, transparency, explainability, cybersecurity and responsible AI governance are raised, with a focus on the need to use AI tools as a complement to rather than a substitute for human judgment (Fiaz & Qureshi, 2024; Zhou et al., 2022). Meta-analyses in the recent years also support the positive relationship between E-HRM and organizational performance, which is influenced by the technological readiness, the organizational resources, the competencies of the users and national digital development. Simultaneously, the systematic reviews reveal a continuous conceptual shift from Electronic Human Resource Management (E-HRM) to Digital Human Resource Management (DHRM) that encompasses a range of AI and advanced analytics, intelligent automation, cloud-based HR systems, and digital employee experiences as key components in the HR landscape (Fiaz & Qureshi, 2024; Zhou et al., 2022). From a methodological perspective, international research is more varied than Arab and Palestinian research methods, and includes quantitative, qualitative, mixed methods, longitudinal, experimental, and systematic research methods, bibliometric analysis, and meta-analysis in public and private institutions from developed and developing countries. Such diversity has created a richer knowledge of the technological, organizational, behavioral and institutional aspects of E-HRM implementation (Strohmeier, 2007; Bondarouk et al., 2017; Zhou et al., 2022). Overall, international scholarship shows that E-HRM has become a strategic organizational capability for digital transformation, organizational resilience, strategic workforce management and evidence-based decision making. However, researchers still have an interest in paying closer attention to country-specific, public sector, and developing economy context, for example, through qualitative research that captures the complexities of politically and institutionally difficult contexts.

**Table 1. Comparative Analysis of Previous Electronic Human Resource Management (E-HRM) Studies**

| Authors | Year | Country   | Research Context | Methodology  | Sample    | Main Findings                                                                 | Identified Gap                                                   |
|---------|------|-----------|------------------|--------------|-----------|-------------------------------------------------------------------------------|------------------------------------------------------------------|
| Saleh   | 2014 | Palestine | Service Sector   | Quantitative | Employees | Acceptance influenced by usefulness, ease of use, and organizational support. | Focused on technology acceptance rather than strategic outcomes. |

|                    |      |             |                          |                   |                      |                                                                          |                                                    |
|--------------------|------|-------------|--------------------------|-------------------|----------------------|--------------------------------------------------------------------------|----------------------------------------------------|
| Saleh & Saleh      | 2016 | Palestine   | Organizations            | Quantitative      | Organizations        | E-HRM adoption constrained by infrastructure and readiness.              | Limited discussion of strategic HR transformation. |
| Abu Naser et al.   | 2017 | Palestine   | Universities             | Quantitative      | IT staff             | Moderate E-HRM implementation; communication and HR databases strongest. | Restricted to universities.                        |
| Al-Alam            | 2018 | Palestine   | Ministry of Health       | Quantitative      | HR staff             | Infrastructure and change resistance hinder implementation.              | Focused on barriers only.                          |
| Al-Soufi & Salama  | 2021 | Palestine   | Pharmaceutical Companies | Quantitative      | Employees            | Training and leadership support are essential.                           | Private sector only.                               |
| Elayyan            | 2021 | Palestine   | Business Environment     | Conceptual        | —                    | Digital business environment supports transformation.                    | Did not specifically examine E-HRM.                |
| Abed & Asmar       | 2022 | Palestine   | E-Recruitment            | Quantitative      | Applicants           | Positive perceptions with fairness concerns.                             | Recruitment only.                                  |
| Shaban             | 2022 | Palestine   | Higher Education         | Quantitative      | University employees | E-HRM improves employee performance.                                     | Focused on employee performance.                   |
| Thabet & Al-Shawa  | 2022 | Palestine   | University of Palestine  | Quantitative      | Employees            | Enhanced organizational performance.                                     | Single institution.                                |
| Herzallah & Ayyash | 2024 | Palestine   | Higher Education         | Quantitative      | University employees | Positive impact on organizational performance.                           | Higher education only.                             |
| Ghoneimat          | 2024 | Palestine   | Public Sector            | Quantitative      | Public employees     | Strengthens governance and transparency.                                 | No ministry-wide synthesis.                        |
| Bondarouk & Ruël   | 2009 | Netherlands | Multiple sectors         | Literature review | —                    | Established strategic E-HRM concept.                                     | Limited developing-country evidence.               |
| Parry & Tyson      | 2011 | UK          | Organizations            | Mixed methods     | HR managers          | Strategic HR contribution depends on readiness.                          | Developed economies focus.                         |
| Stone et al.       | 2015 | USA         | Multiple sectors         | Review            | —                    | Improves efficiency but raises privacy issues.                           | Limited developing-country evidence.               |
| Marler & Boudreau  | 2017 | USA         | Multiple sectors         | Systematic review | —                    | HR analytics supports evidence-based HR.                                 | Need longitudinal studies.                         |

|                                |      |               |                  |                   |   |                                             |                                             |
|--------------------------------|------|---------------|------------------|-------------------|---|---------------------------------------------|---------------------------------------------|
| Bondarouk, Parry & Furtmueller | 2017 | International | Global           | Systematic review | — | TOP framework for E-HRM adoption.           | Limited qualitative public-sector evidence. |
| Strohmeier                     | 2020 | Germany       | International    | Review            | — | Evolution toward digital HR transformation. | Need more developing-country research.      |
| Vrontis et al.                 | 2022 | International | Multiple sectors | Review            | — | AI reshapes HRM.                            | Public-sector implementation underexplored. |

## DISCUSSION

The literature examined in this study reveals that Electronic Human Resource Management (E-HRM) has gone through an incredible advancement in the last 40 years. Initially designed as a technological solution for automating the basic management of personnel, E-HRM has gradually become a tactical and strategic organizational ability that enables digital transformation, evidence-based decision making, human resource analytics, organizational agility, and sustainable human resource management. This evolution is evident in all international, Arab and Palestinian scholarship and is different in degree and complexity from one institutional and national context to another. It has been concluded from the literature reviewed that E-HRM has positive impacts on the effectiveness of organizations when it is used as a system of an organization and not as individual technological implementations. Research on integrated E-HRM systems consistently shows that operational efficiency, decision-making, employee engagement, organizational flexibility and strategic management of workforce are enhanced after implementing such systems (Bondarouk & Brewster, 2016; Marler & Boudreau, 2017; Strohmeier, 2020). Arab studies also show that in order to optimize organizational performance, transparency and public service quality and competitiveness, they need to increase their organizational readiness and digital transformation, while various issues of organizational readiness and digital transformation remain persistent. A similar developmental path is evident in Palestinian literature, and is characteristic of the particular administrative and institutional attributes of the Palestinian public sector. Early Palestinian research focused mainly on technology acceptance, barriers to technology implementation and organizational readiness (Saleh, 2014; Saleh & Saleh, 2016). However, as digital transformation projects grew, the focus of the more recent studies shifted to exploring the strategic impacts of E-HRM implementation, such as employee performance (Shaban, 2022), organizational performance (Herzallah & Ayyash, 2024), electronic recruitment (Abed & Asmar, 2022), governance (Ghoneimat, 2024), and organizational innovation (Al-Soufi & Salama, 2021). This chronological development shows that Palestinian studies have moved from considering the evaluation of technological adoption to studies that examine organizational value created through digital HR practices. However, the international and Palestinian bodies of knowledge are not the same and some significant differences still exist. More and more international research projects have focused on topics like HR Analytics, Artificial Intelligence, predictive workforce planning, cloud-based HR ecosystems, digital employee experience, or intelligent decision-support systems. On the other hand, most of the studies on Palestinian and Arab studies are still on the implementation of operational E-HRM functions such as recruitment, training, communication, performance appraisal, and electronic record management. In the Palestinian context, however, the use of strategic digital tools, such as using workforce analytics, making HR decisions with AI tools, digital governance, and predictive talent management, are relatively under-researched. Another significant note relates to the factors that shape the successful implementation of E-HRM. Technological infrastructure is always a prerequisite but never the sole solution to successfully implementing digital transformation, in all levels of the literature. Instead, the factors that frequently appear as enabling factors are organizational readiness, leadership commitment, institutional culture, employee digital competencies, financial investment, cybersecurity, and change management. The results from this study support the idea that an E-HRM system should be considered as a socio-technical organizational system, where technological innovations and organizational capabilities are not developed separately. The reviewed literature also indicates that E-HRM is increasingly related to other public administration reforms. New studies more and more situate the electronic human resource management in the broader landscape of digital government, institutional governance, organisational resilience, sustainability and public sector modernization. The use of E-HRM is no longer regarded as merely an administrative support system, but as an effective tool for enhancing

transparency, accountability and evidence-based decision-making and institutional performance, especially in developing countries. This more comprehensive vision is particularly applicable to Palestinian Authority institutions that have been prioritizing administrative modernisation as a policy. The reviewed studies also show a methodologically similar pattern. There is significant methodological variability as demonstrated in the international literature, ranging from qualitative, quantitative, mixed-methods, systematic reviews, up to bibliometric analyses and meta-analyses of E-HRM. By comparison, however, there is little qualitative comparative research in the field of Arab and Palestinian scholarship. Qualitative research on the domains of leadership experiences, organizational culture, implementation processes, institutional learning and contextual influences, is still relatively scarce. This methodological disparity is a limitation of the current research that hinders an understanding of the implementation processes of E-HRM in complex organisational contexts, especially in public administration, where political, economic and institutional uncertainty exists. The evidence reviewed has indicated that the future of Electronic Human Resource Management will rely on the integration of sophisticated digital technologies with strategic human resource management, beyond simply automating administrative processes, will be a key component of organizations. This shift will need continuing investment in integrated Human Resource Information Systems, digital leadership, workforce analytics, cybersecurity, employee capability building and institutional cooperation for Palestinian Authority institutions. These would enhance administrative efficiency as well as organisation's resilience, strategic decision making and long-term modernization of the public sector HRM system.

## RESEARCH GAP AND FUTURE RESEARCH DIRECTIONS

This collection of literature shows that there is significant development of understanding regarding the adoption, implementation and outcomes of the organization of electronic human resource management (E-HRM). Despite this, the critical review in this study highlights that there are still some conceptual, methodological, contextual and practical gaps that are yet to be addressed in order to have a comprehensive understanding of E-HRM, especially in developing countries and public sector organizations. Conceptually, most of the current research still focuses on E-HRM from an operational viewpoint, that is, on the automation of traditional HR-related tasks like recruitment, training, payroll management, performance management, and personnel management. Comparatively less research explores the strategic linkage of E-HRM with other organizational ideas such as digital transformation, strategic workforce planning, organizational resiliency, digital governance, knowledge management, institutional sustainability, and public sector innovation. Therefore, the need to reposition E-HRM as a strategic capability of the organization and not an administrative information system remains. The literature is mostly quantitative cross-sectional research methodology using questionnaire surveys and statistical analysis. While these studies have yielded useful empirical insights into the relationships between E-HRM practices and organizational outcomes, they offer relatively limited insights into the experience, management and sustainment of digital HR transformation in complex organizational contexts. They are relatively few qualitative studies on leadership experiences, on organizational learning, on implementation processes, on perceptions of employees, and on institutional culture, especially in public administration. Similarly, longitudinal studies which look at the long-term organizational outcomes of E-HRM implementation are highly under-represented.

The review further reveals an important geographical imbalance in the international knowledge base. Most influential studies originate from developed economies characterized by advanced technological infrastructure, mature digital ecosystems, and substantial investment in organizational innovation. Consequently, comparatively limited evidence is available from developing countries experiencing financial constraints, institutional instability, fragmented technological infrastructure, or complex political environments. Such contextual differences may significantly influence both the implementation and organizational outcomes of Electronic Human Resource Management.

Within the Arab region, although research activity has increased substantially during recent years, existing studies continue to concentrate predominantly on implementation determinants and organizational performance. Relatively limited attention has been devoted to advanced digital HR capabilities, including Human Resource Analytics, Artificial Intelligence, predictive workforce management, cloud-based HR ecosystems, cybersecurity governance, and digital employee experience. Furthermore, most Arab studies

examine universities or private sector organizations, while governmental ministries and central public administration institutions remain comparatively underrepresented.

The Palestinian literature demonstrates similar limitations despite its considerable recent development. Existing studies have made important contributions by examining technology acceptance (Saleh, 2014), organizational adoption (Saleh & Saleh, 2016), implementation within higher education institutions (Abu Naser et al., 2017; Shaban, 2022; Herzallah & Ayyash, 2024), electronic recruitment (Abed & Asmar, 2022), governance (Ghoneimat, 2024), and organizational innovation (Al-Soufi & Salama, 2021). Nevertheless, the majority of these investigations focus on universities, healthcare institutions, private organizations, or individual public agencies rather than providing a comprehensive synthesis of E-HRM implementation across Palestinian Authority institutions as a whole. Moreover, few studies critically integrate Palestinian evidence within broader Arab and international developments to identify common patterns, contextual differences, and future strategic priorities.

Another important gap concerns the rapid evolution of digital technologies themselves. While recent international scholarship increasingly examines Artificial Intelligence, predictive analytics, intelligent automation, digital platforms, and cloud computing, these topics remain only marginally represented within Palestinian and much of the Arab literature. As public organizations accelerate digital transformation, understanding how these emerging technologies reshape human resource management represents an increasingly important research priority.

Accordingly, the present study contributes to the literature by providing a comprehensive qualitative synthesis of Electronic Human Resource Management within Palestinian Authority institutions through the integration of Palestinian, Arab, and international evidence. Rather than examining a single E-HRM function or organizational outcome, the review adopts a holistic perspective encompassing the conceptual foundations, core functions, implementation experiences, organizational benefits, implementation challenges, and emerging digital trends shaping contemporary Electronic Human Resource Management. In doing so, the study establishes a comprehensive knowledge base capable of supporting future empirical investigations and informing digital transformation initiatives within Palestinian public administration.

### **Future Research Directions.**

Based on the identified gaps, several promising directions for future research emerge. First, future studies should investigate the strategic integration of Human Resource Analytics and Artificial Intelligence within Palestinian public institutions, particularly regarding evidence-based decision-making, workforce planning, and talent management. Second, qualitative and mixed-methods research should be expanded to explore organizational culture, digital leadership, employee experiences, and institutional learning during E-HRM implementation. Third, comparative studies involving Palestinian institutions and other Arab public administrations would enhance understanding of contextual similarities and differences in digital HR transformation. Fourth, longitudinal research examining the long-term organizational effects of E-HRM implementation would provide stronger evidence regarding sustainability, institutional performance, and organizational resilience. Finally, future research should explore the relationship between Electronic Human Resource Management and emerging organizational concepts, including digital governance, sustainable human resource management, knowledge management, organizational innovation, and public sector digital transformation.

### **Limitations of the Review**

There are some limitations due to the use of literature review design in this study. The results rely on the availability, quality and extent of the publications that have been published, and specifically the limited number of publications that investigate E-HRM in Palestinian Authority institutions. Finally, there may be limitations in comparing the studies or extrapolating results due to differences across them on organizational context, research methods, samples, and measures. Therefore, the findings of this review need to be understood as a

synthesis of the available evidence and not as a direct empirical evaluation of the implementation of E-HRM in all Palestinian Authority institutions.

## CONCLUSION

Electronic Human Resource Management has emerged as one of the most significant developments in contemporary Human Resource Management, reflecting the broader digital transformation experienced by organizations worldwide. The literature reviewed in this study demonstrates that E-HRM has evolved from a technology-driven approach focused primarily on automating administrative procedures into a comprehensive strategic framework that supports organizational effectiveness, workforce development, evidence-based decision-making, and institutional competitiveness.

The review further indicates that the implementation of E-HRM generates substantial organizational benefits when supported by appropriate technological infrastructure, organizational readiness, leadership commitment, and employee digital competencies. Integrated digital HR systems enhance operational efficiency, improve communication, facilitate talent management, strengthen organizational transparency, and contribute to more effective strategic human resource management. However, these benefits are neither automatic nor universal; they depend on the successful alignment of technological capabilities with organizational structures, institutional culture, and strategic objectives.

The analysis also reveals important differences across international, Arab, and Palestinian contexts. While international research increasingly explores advanced digital capabilities such as Artificial Intelligence, Human Resource Analytics, predictive workforce planning, and intelligent HR ecosystems, much of the Arab and Palestinian literature remains focused on operational implementation and organizational performance. Nevertheless, Palestinian scholarship has experienced notable development during the past decade, progressing from studies of technology acceptance and implementation barriers toward investigations of organizational performance, governance, employee effectiveness, and institutional modernization.

Despite this progress, significant challenges continue to affect the maturity of E-HRM implementation within Palestinian Authority institutions. Fragmented information systems, financial constraints, technological infrastructure, cybersecurity requirements, organizational resistance to change, and limited digital competencies continue to influence the pace of digital transformation. Addressing these challenges requires long-term institutional commitment, strategic investment in Human Resource Information Systems, continuous employee development, effective digital leadership, and stronger integration between human resource management and national digital transformation initiatives.

Overall, this review confirms that Electronic Human Resource Management should no longer be viewed simply as a technological innovation but rather as a strategic organizational capability that enables public institutions to improve administrative efficiency, strengthen governance, support evidence-based decision-making, and enhance organizational resilience. By synthesizing Palestinian, Arab, and international literature, this study provides a comprehensive understanding of the current state of E-HRM and establishes a conceptual foundation for future empirical research and policy development within Palestinian Authority institutions. Ultimately, strengthening E-HRM represents not only a technological imperative but also a strategic pathway toward building more responsive, transparent, and sustainable public sector organizations.

## REFERENCES

1. Abdullah, M. F., Shaban Jamal Ayyat, & Bahyah Binti Abdul Halim. (2021). Challenges of Human Resource Management in Palestine . The Journal of Management Theory and Practice (JMTP), 2(4), 17-22. <https://doi.org/10.37231/jmtp.2021.2.4.122>
2. Abed, A., & Asmar, M. (2022). *Applicants' perceptions toward electronic recruitment systems in Palestinian organizations*. Journal of Human Resources Management Studies, 2022, 1–15.
3. Abu Naser, S. S., Al Shobaki, M. J., Amuna, Y. M. A., & El Talla, S. A. (2017). The reality of

- electronic human resource management in Palestinian universities from the perspective of employees in information technology centers. *International Journal of Engineering and Information Systems*, 1(4), 74–96.
4. Aguinis, H. (2023). *Performance management* (5th ed.). Chicago Business Press.
  5. Ahmed Daoud Issa Helou. The Reality of Electronic Human Resource Management in Palestinian Public Sector Institutions and Its Relationship to Administrative Empowerment: The Civil Service Bureau as a Model (Doctoral dissertation, Al-Quds University).
  6. Al Shobaki, M. J., Abu Naser, S. S., Amuna, Y. M. A., & El Talla, S. A. (2017). The reality of electronic management in Palestinian governmental institutions. *International Journal of Engineering and Information Systems*, 1(7), 1–19.
  7. Al-Alam, A. (2018). *Obstacles to implementing electronic human resource management in the Palestinian Ministry of Health* (Master's thesis). Islamic University of Gaza.
  8. Al-Soufi, A., & Salama, A. (2021). The impact of electronic human resource management on administrative innovation in Palestinian pharmaceutical companies. *Palestinian Journal of Business Administration*, 5(2), 45–67.
  9. Al-Soufi, Ashraf, Salama, & Ashraf. (2021). Requirements for Implementing Electronic Human Resource Management as an Approach to Achieving Administrative Creativity: An Applied Study on Palestinian Pharmaceutical Companies. *Economic Notebooks Journal*, 12(2), 1-18.
  10. Associate Professor Dr. Wael Thabet, Lecturer, & Ms. Iman Al-Shawa. (2022). Electronic Human Resource Management Practices and Their Role in Improving Organizational Performance: An Applied Study - Palestine University. *Strategic Studies and Political Research*, 1(2), 43-68.
  11. Ayyat, S. (2021, December). *Human Resource Management in Unstable Societies: Challenges, Strategic Responses, and Future Directions*. ResearchGate. Available at: <https://doi.org/10.13140/RG.2.2.28507.73761>.  
[https://www.researchgate.net/publication/410668261\\_Human\\_Resource\\_Management\\_in\\_Unstable\\_Societies\\_Challenges\\_Strategic\\_Responses\\_and\\_Future\\_Directions](https://www.researchgate.net/publication/410668261_Human_Resource_Management_in_Unstable_Societies_Challenges_Strategic_Responses_and_Future_Directions)
  12. Ayyat, S. (2025, September). Challenges facing human resources management in Palestine. In 2nd International Postgraduate Research Conference 2019, Universiti Sultan Zainal Abidin (UniSZA), Terengganu, Malaysia. ResearchGate. [https://www.researchgate.net/publication/395298836\\_CHALLENGES\\_FACING\\_HUMAN\\_RESOURCES\\_MANAGEMENT\\_IN\\_PALESTINE](https://www.researchgate.net/publication/395298836_CHALLENGES_FACING_HUMAN_RESOURCES_MANAGEMENT_IN_PALESTINE)
  13. Ayyat, S. (2026). Applying Multiple Intelligences Theory in Human Resource Management.
  14. Ayyat, S., & Bassam, A. (2025, September). Artificial intelligence in human resource management: Opportunities, challenges, and the path forward. Paper presented at the International Conference on Human Resource Management and Technology (ICHRMT), Riffa, Bahrain. Shaban Ayyat's Lab. [https://www.researchgate.net/publication/395206110\\_Artificial\\_Intelligence\\_in\\_Human\\_Resource\\_Management\\_Opportunities\\_Challenges\\_and\\_the\\_Path\\_Forward](https://www.researchgate.net/publication/395206110_Artificial_Intelligence_in_Human_Resource_Management_Opportunities_Challenges_and_the_Path_Forward)
  15. Bondarouk, T., & Brewster, C. (2016). Conceptualizing the future of HRM and technology research. *The International Journal of Human Resource Management*, 27(21), 2652–2671.
  16. Bondarouk, T., & Ruël, H. (2009). Electronic human resource management: Challenges in the digital era. *The International Journal of Human Resource Management*, 20(3), 505–514.
  17. Bondarouk, T., Harms, R., & Lepak, D. (2017). Does e-HRM lead to better HRM service? *The International Journal of Human Resource Management*, 28(9), 1332–1362.
  18. 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.
  19. Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48(1), 24–42.
  20. Elayyan, M. Y. M. (2021). Developing an E-BUSINESS Model for Enterprises based on the Palestinian Business Environment (Doctoral dissertation, Al-Quds University).
  21. Fiaz, M., & Qureshi, M. A. (2024). Digital human resource management: A systematic literature review and future research agenda. *Human Resource Management Review*, 34(2), 100982.
  22. Ghoneimat, A. (2024). Electronic human resource management and governance in Palestinian public institutions. *Journal of Public Administration and Governance*, 14(1), 115–134.

23. Ghunaimat, & Walaa Khalil. (2024). E-Management of Human Resources and its Role in Enhancing Governance Standards in the Palestinian Public Sector.
24. Hallou, A. (2020). *Electronic human resource management in the Palestinian public sector* (Doctoral dissertation, Al-Quds University).
25. Hendrickson, A. R. (2003). Human resource information systems: Backbone technology of contemporary human resources. *Journal of Labor Research*, 24(3), 381–394.
26. Herzallah, A., & Ayyash, M. (2024). The impact of electronic human resource management on organizational performance in Palestinian higher education institutions. *Journal of Management Development*, 43(2), 211–228.
27. Iman Fouad Ahmed Al-Alem. (2018). Obstacles to Implementing E-Management in Human Resources from the Perspective of Human Resources Managers and Staff at the Palestinian Ministry of Health in Ramallah and Al-Bireh Governorate (Doctoral dissertation, Al-Quds University).
28. Kovach, K. A., Hughes, A. A., Fagan, P., & Maggitti, P. G. (2002). Administrative and strategic advantages of HRIS. *Employment Relations Today*, 29(2), 43–48.
29. Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR Analytics. *The International Journal of Human Resource Management*, 28(1), 3–26.
30. Marler, J. H., & Fisher, S. L. (2013). An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*, 23(1), 18–36.
31. Mehran, Nasser, Attia, Samaa Taher, Al-Tabbal, & Abdullah Abdullah Ahmed. (2023). Electronic Human Resource Management as a Modern Trend in Human Resource Management: A Theoretical Study. *Journal of Administrative, Financial and Quantitative Research*, 3(1), 39-70.
32. Ministry of Communications and Information Technology. (2023). *Digital Transformation Strategy for the Palestinian Public Sector 2023–2025*. Palestinian National Authority.
33. Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2023). *Fundamentals of human resource management* (9th ed.). McGraw-Hill.
34. Parry, E., & Tyson, S. (2011). Desired goals and actual outcomes of e-HRM. *Human Resource Management Journal*, 21(3), 335–354.
35. Ruël, H., Bondarouk, T., & Van der Velde, M. (2007). The contribution of e-HRM to HRM effectiveness: Results from a quantitative study. *Employee Relations*, 29(3), 280–291.
36. Saaïda M. & Ayyat S. J. (2025). The Faltering Start of Digital Transformation of Public Services in Developing Countries. *IKR Journal of Arts, Humanities and Social Sciences (IKRJAHS)*, 1(4), 177-192.
37. Saleh, M. (2014). Factors affecting the acceptance of electronic human resource management systems in the Palestinian service sector. *Palestinian Journal of Administrative Sciences*, 10(2), 67–92.
38. Saleh, M., & Saleh, S. (2016). Adoption of electronic human resource management systems in Palestinian organizations. *International Journal of Business and Management*, 11(8), 168–182.
39. Shaban, S. (2022). The impact of electronic human resource management on employee performance in Palestinian higher education institutions. *Palestinian Journal of Administrative and Economic Studies*, 8(1), 55–78.
40. Shaban, S. M. S. (2022). The Impact of E-HRM Practices on Employee Performance in Palestinian Higher Educational Institutions رسالة ماجستير (Doctoral dissertation, AAUP).
41. 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.
42. Strohmeier, S. (2007). Research in e-HRM: Review and implications. *Human Resource Management Review*, 17(1), 19–37.
43. Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and opportunities. *California Management Review*, 61(4), 15–42.
44. Thabet, A., & Al-Shawa, M. (2022). The impact of electronic human resource management on organizational performance at the University of Palestine. *Journal of Administrative Sciences*, 18(2), 145–168.
45. van Geffen, M., Ruël, H., & Bondarouk, T. (2013). E-HRM implementation and organizational transformation. In T. Bondarouk & M. Olivas-Luján (Eds.), *Advanced series in management: Human resource management, social innovation and technology* (Vol. 14, pp. 183–201). Emerald.
46. 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.

47. Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration during COVID-19. *European Journal of Information Systems*, 29(4), 429–442.
48. Zhou, Y., Fan, Y., & Son, J. (2022). Electronic human resource management and organizational performance: A meta-analysis. *Human Resource Management Review*, 32(4), 100863.