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## The effect of e-HRM and digital orientation on MEs' performance in Amman: The moderating role of government support

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### ABSTRACT

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Human resource management is essential to the success of the organization based on the concept that an organization achieves a competitive edge by effectively and efficiently utilizing its people. However, HR professionals require organizational support to increase employee commitment and passion for their work. In this study, the goal of the study is to explore the moderating impact of government support in the relation between electronic human management (E-HRM), digital orientation, and performance of medium enterprises. To examine the relationships, the researcher collected data from 309 managers from Amman's medium-sized businesses via a survey questionnaire. Partial least squares-structural equation modelling (PLS-SEM) is used in statistical analysis to evaluate the data as well as test hypotheses. The data showed that E-HRM and digital orientation have a good and substantial impact on ME performance. Furthermore, government support has a positive and significantly moderating effect between digital orientation and ME performance. On the other hand, government support has insignificant moderating influence on E-HRM and ME performance. This research extends to the literature on digital services and electronic human resource management practices in the sector of local medium enterprises. This research also discusses the implications and the future directions. One of these is that the study framework gives guidelines to HR practitioners on what competences they should focus on to improve in digital and electronic human resource management. According to the results of this research, HR professionals in medium-sized businesses should be involved in digital services, strategy planning and implementation in their organizations.

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## 1. Introduction

Medium enterprises (MEs) play a vital role for the growth of the countries. In other words, MEs represent an important economic sector that concerns all countries of the world specially the developing countries including Jordan. Jordan has over 100,000 enterprises but small as well as medium (97 percent of all the companies), making up more than 50 percent of gross domestic product (GDP) of the country, employing 60 percent of the workforce of Jordan, and accounting for 45 percent of the exports. MEs in Jordan drive economic growth and innovation through electronic human management (E-HRM) systems, improving operational efficiency and competitiveness. However, government support influences their performance, impacting their performance (Alkhaldeh et al., 2023). MEs adopt digital technologies to improve performance and sustain sustainable development. They equip employees with digitally skilled mental abilities, enhancing employee capability and assisting in technology-based services. Electronic human resource management (E-HRM) efficiently performs human resource (HR) functions, allowing managers and employees to focus on strategic tasks (Holmström et al., 2017; Verhoef et al., 2019; Nambisan, Lyytinen, & Yoo, 2020). New technologies, such as E-HRM, improve efficiency and effectiveness in small and

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medium organizations. They can lower expenses, speed up information delivery, and enhance effectiveness in managing human resources. However, MEs often lack resources like finance, knowledge, experience, as well as information compared to larger companies that are digitally ready (Al-Weshah, Kakeesh, & Alhammad, 2022). Digital orientation improves MEs by achieving efficiencies through a digitally oriented strategy. Advanced digital improvements in operations and action plans lead to high rankings and enhanced progress, as businesses develop digitally transformed resources (Bouncken & Barwinski, 2020).

Governmental policies and incentives can influence MEs' willingness to invest in E-HRM and digital orientation, particularly in the face of potential risks and uncertainties. Therefore, the central question to be addressed in this study is: How does government support moderate the impact of E-HRM adoption and digital orientation on MEs' performance in Jordan? By investigating this question, the study aims to shed light on the complex interplay between technology adoption, government support, and ME performance, providing valuable insights for policymakers, ME owners, and managers in Jordan (Al-dmour, 2016). Small businesses face challenges due to rapid global changes, particularly in the MEs industry of Jordan. Technology adoption is crucial for competitive advantage, but lack of acceptance can lead to low productivity, managerial skills, financial incapacity, regulatory constraints, and difficulty accessing technology (Radam, Abu & Abdullah, 2008; Lucky & Olusegun, 2012). Medium business enterprises can improve their performance by utilizing digital technology to streamline their internal data flow process. This technology improves customer service, product services, operations, and internal data collection. Digital integration also aids MEs in developing external networking and gaining a competitive advantage in the internal market. Studies show that digital technology orientation offers global coverage without creating a borderline between networking and services (Lin & Kunnathur, 2019; Ardito et al., 2019).

Some of the problems of MEs performance highlighted in Jordan were limited access to financing: MEs often struggle to secure adequate funding from banks and financial institutions due to perceived higher risk and collateral requirements. High bureaucratic hurdles: Navigating through government regulations, licenses, permits, and bureaucratic red tape can be time-consuming and costly for MEs (Airout et al., 2023). Infrastructure limitations: Deficiencies in transportation, utilities, and communication infrastructure can impede the efficiency and competitiveness of MEs in Jordan. Inadequate access to the technology and innovation: A lack of technological infrastructure and knowledge can hinder MEs from adopting innovative practices, reducing their ability to compete effectively. Export barriers: MEs may struggle to enter international markets due to trade barriers, export regulations, and lack of access to information on foreign markets (Alkhalwaldeh et al., 2023).

Consequently, the goal of this research is to examine how government support affects how well MEs perform in Jordan in terms of E-HRM and a digital orientation. As far as we know, this research is the first academic effort to conduct a comprehensive analysis on E-HRM, digital orientation, government support and performance of MEs in Jordan.

## 2. Literature Review

One of the core ideas in the literature on strategic management is that of firm performance. Performance-based metrics are used to evaluate businesses (Costa Melo et al., 2023). As a result, effective strategic decision-making determines performance and enhances a firm's competitiveness, competitive advantage, and superior performance (Ferreira & Otley, 2009). In reality, enterprises must integrate, reorganize, and rebuild strategies that are beneficial to them, provide them with a competitive edge, and produce sustainable performance over rivals in order to obtain a competitive advantage (Susanto et al., 2023). In a study Madrid-Guijarro, Auken, and Lema (2007) described that precisely measuring performance may give businesses trustworthy information about factors that affect performance as well as how best to use and manage resources, build winning strategies, satisfy customer demands, and successfully compete. The performance of MEs can be analyzed quantitatively in terms of efficiency, financial outcomes, production volume, and customer base (Anggadwita & Mustafid, 2014), share of the market, profit, production, dynamics of the revenues, costs and liquidity (Gupta & Batra, 2016; Zimon, 2018), additionally, from a qualitative viewpoint: staff behavior, leadership style, as well as goal achievements (Anggadwita & Mustafid, 2014), satisfaction of customers (Alpkan et al., 2007), product & process innovation, as well as organizational & marketing innovation (Sheehan, 2013), in their work, Gopang et al. (2017) examined 14 indicators to characterize the performance of MEs: credibility, productivity, profits, sales, profits, employee satisfaction, sales, timely order delivery, adequate working capital, efficiency in production operations, quality of the product, target proficiency, number of customers, ease of supervision, diversification of the products, and a decrease in product cost.

Subsequently, MEs are evaluated with performance based on profitability, market value, growth, value addition, return on capital, retention, and customer satisfaction (Aladejebi & Olufemi, 2018; Mihaela, 2017). As a result, a firm's performance can be described as achieving its goals and objectives, which are indicators of how well a company is doing (Astuti et al., 2020). The organizational perspective states that MEs' performance is "their ability to survive, grow, and contribute to the creation of jobs and poverty alleviation" (Alzeaiden, 2019). MEs performance is considered one of the very critical factors in determining the company's success. Furthermore, performance has been measured in a range of methods in the research, and numerous variables have been utilized (Alzeaiden, 2019). Revenue, sales, share price, and strategic edge were used to evaluate SEMs performance. On the other hand, Khashman and Al-Ryalat (2015) defined performance as "a proclivity for innovation. Return on the investment (ROI), sales, profit, as well as market share are other ways to assess performance

(Alzoubi & Jaaffar, 2020). Furthermore, Astuti et al. (2020) evaluated a company's effectiveness, expansion, competitiveness, strategic orientation, endurance, and stability, for weighing performance. According to a study on the relation between administration and performance of SEMs in Jordan, the organization's performance is evaluated by return on equity (ROE) and returned on assets (ROA) (Poudel et al., 2019; Utomo et al., 2019). It was stated that increased corporate performance is directly linked to organizational inventiveness (Quinton et al., 2018; Wasim, 2021).

HRM has undergone various developments over time, among which digital transformation of HRM or E-HRM has gained more interest from HR management practitioners. It has increased the rate of data travel, and it can perform various jobs. It can also serve as a guide for creating informed decisions (Obeidat, 2017). The phrase E-HRM was introduced during the early 1990s with the merger of two disciplines, namely IS and HRM (Al Mashrafi, 2020). Various other terms also know e-HRM. Furthermore, scholars also used terminologies like online HR (Denver et al., 2018), Human resource information system (Walinda, 2013), web-service HRM (Imran et al., 2021), internet HRM (Hosain, 2017), and HRM online service (Powell et al., 2017). E-HRM is used in this research study because it encompasses a wider component of HRM than the other aforementioned terminologies (Shane, 2009). It mentions any kind of HR activity that can be enabled through an Information system. E-HRM is an online method of assisting HR practices through a network, the web, or Enterprise resource planning (Handayani & Fitriati, 2019). Various academics have extended the concept of E-HRM. Shane (2009) described that "E-HRM is the use of something to assist and connect at least two identities or cooperative actors in their shared human resource responsibilities". The most comprehensive and all-inclusive definition of E-HRM is provided by Handayani and Fitriati (2019). They grouped all the significant techniques and materials in the HRM and IT worlds under one overarching name E-HRM. Some research studies have mentioned E-HRM as an internet system designed to apply HR strategies, procedures, and techniques to meet organizational objectives (Denver et al., 2018). According to Al Mashrafi (2020), E-HRM uses IT to give employees and managers immediate access to HR processes such as documentation, reports, job evaluation, and organizational learning.

Ceric (2017) also conducted a study to assess and evaluate owners' perceptions about using E-HRM in Jordan. However, the standard checklist to observe the perceived effectiveness of E-HRM and its impact on various problems, worker attitudes, personal actions, and HRM system keeps changing. Agahi (2020) has described the increasing usage of the technology in E-HRM, subsequent improvement in HR practices and procedures. The performance comparison between HR function with and without E-HRM reflects that E-HRM is far more productive (Agahi, 2020; Ceric, 2017; Srinuan, 2014). HRM is expected to hire qualified individuals through efficient recruiting and selection processes, HR activities are essential for a company's productivity in any modern business (Sunki & Subha, 2021). An effective E-HRM aids in gathering, creating, and using knowledge assets to increase revenues (Al Mashrafi, 2020; Arfara et al., 2017). Various studies have concluded that online performance appraisal applications are efficient management and ESS tools (Al Marhoobi & Srinivasan, 2021). For instance, a performance appraisal system online can be applied with the position of the employee description modules, allowing managers to collect information about a position's general tasks, functions, evaluations and qualifications. (Rouhoma, 2010). Furthermore, its archives help management keep track of previous assessments, enabling them to compare workers' progress over time (Al Marhoobi & Srinivasan, 2021). Digital mail (email) is an essential feature of E-HRM to contact employees. In business situations, browser connection, mostly e-mail, has an adoption rate of more than 75%, and e-mail has been established as the preferred mode of communication (Masum et al., 2017). IT can improve HR's authority to give HR functions schedules, which has a strategic effect. For instance, E-HRM offers various services, such as worker identity, knowledge transfer, and access to improve efficient communication (Quaosar et al., 2018; Seif, 2015). Furthermore, through wireless monitoring of HR resources, E-HRM can increase the efficiency and effectiveness offered to management and staff by supporting their choices and increasing the communication process (Omran & Anan, 2019; Nawafleh, 2021).

MEs' performance is characterized as their capacity to endure, develop, and contribute to creating jobs and reducing poverty (Alzeaideen, 2019). It leads to an increased knowledge base and higher data sensitivity. E-HRM systems also increase the effectiveness of HR processes in enterprises (Alkhodary, 2021). It helps in HR management practices and time-consuming administrative transaction processing, archiving learning outcomes, career planning, work engagement, and in reducing employee turnover (Girisha & Nagendrababu, 2020; Alzeaideen, 2019). E-HRM implementation delivers benefits on three levels: individual, organization, and social (Zhou et al., 2021). The study focuses on the usage of E-HRM as well as the generation of value at the administrative level. As a result, it is assumed that this will be accomplished through enhanced Performance management. According to Al-kasasbeh et al. (2016), there are two benefits to using E-HRM: use benefit and medium of exchange. The structural capabilities of the E-HRM system may be applied to track it. The financial amount produced via the trade of a new assignment, product, and service is the exchange value (Shah et al., 2020). The value of E-HRM is primarily derived from cost savings. According to a previous study, most literature emphasizes the usage value rather than trade value. The research studies have placed a premium on the firm profitability of E-HRM (Shah et al., 2020; Zhou et al., 2021;). Some research demonstrates a substantial relationship between E-HRM and MEs performance (Muqaddim & Hosain, 2021; Zhou et al., 2021). Moreover, past studies identified a positive relation between E-HRM and MEs performance (Al-kasasbeh et al., 2016; Ceric, 2017; Ahmed, 2019). Studies revealed that E-HRM positively affects SMEs performance in Jordan (Al-kasasbeh et al., 2016; Alzeaideen, 2019; Anwar & Ali Shah, 2020). Development and employment of E-HRM is a vital resource of MEs as many existing small or medium sized businesses and new entrants need efficient and effective HRM systems in the competitive and demanding corporate environment which is the need of institutional theory. Thus,

according to institutional theory, corporate environmental pressure forces MEs to differentiate technologically in the struggle for existence and survival. Similarly, this E-HRM becomes a vital source for organization for success and performance of organizations. Therefore, resource-based view is also an important theory to describe the relation between E-HRM and MEs performance. Thus, firms need to develop E-HRM resources. Hence RBV theory along with the institutional theory explains the following hypothesized relationship of the present study: -

**H<sub>1</sub>:** *E-HRM has a positive relationship with MEs ' Performance.*

The digital orientation of a company represents its ideas about managing the company and directing its efforts (Khin & Ho, 2018; Molinillo & Japutra, 2017). Market-oriented companies aim to create and supply customer satisfaction (Quinton et al., 2018). Such firms seek initiatives that promote the “generation of market intelligence about current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it” (Nguyen et al., 2015). The connection between digital orientation and organizational success has been focus of numerous studies across numerous industries and regions (Cenamor et al., 2019). The digital orientation leads the business to remain in touch with the marketplace and address customer wants (Khin & Ho, 2018; Molinillo & Japutra, 2017). Similarly, MEs emphasize marketing strategy as a component of digital orientation (Alma et al., 2018). Digital orientation is an important asset, and it entails seeking and analyzing exterior data to spot new avenues (Khin & Ho, 2018; Nguyen et al., 2015). Digital-oriented MEs perform especially well because their small size and few line managers ease the transmission of business data throughout the company (Ibrahim et al., 2016), and their adaptability allows for quick adjustments to trade data (Utomo et al., 2019).

Digital Orientation means the objective strategic positioning of a firm in getting benefits of digital technology. In a dynamic market, digital orientation is an alternative that can constantly generate competencies and help firms to respond rapidly to these developments (Kumar et al., 2018). Rizan et al. (2019) explained in their study that digital orientation is the firm's response to the aspects of the business world. This orientation is the necessary focus frequently depicted as a determinant of high-performing companies with a significant advantage (Al-Okaily et al., 2020; Lutfi et al., 2022). Preceding studies have discovered a correlation between the decision on digital strategy and performance (Degong et al., 2018; Gordon et al., 2015). Abiodun and Kida (2016) used a mixture of survey methods and interviews with companies with this strategy sample of Jordan organizations. They observed a connection between digital orientation and corporate performance (Alzeaiden, 2019; Al-Okaily et al., 2020; Lutfi et al., 2022). Digital orientation influences organizational performance because it improves the technologies and behaviour of employees (Abiodun & Kida, 2016; Quinton et al., 2018). Alshirah et al. (2021) researched 238 MEs and discovered a good and substantial association between digital orientation and performance. The discussion mentioned above shows that technology adoption is a deliberate decision that works in collaboration (Alzeaiden, 2019; Al-Okaily et al., 2020; Lutfi et al., 2022). In this way, Digital orientation enhances the performance of MEs. Thus, it is postulated that;

**H<sub>2</sub>:** *Digital orientation has a positive relationship with MEs ' Performance.*

The government provides support for MEs through various provincial, municipal, and county programs (Abate et al., 2020; Maksimov et al., 2020). The government's support for business development has some justification. This rationale cites systemic problems as a source of bias toward MEs, like price inefficiencies and slow development capabilities (Maksimov et al., 2020; Songling et al., 2018). Local authorities are mainly engaged in the planning and implementing ME digital innovations because of their connection to MEs. Governments should allow flexibility to these local authorities to take the necessary steps in promoting MEs' development (Ji & Miao, 2020). Governments, on the other hand, should play a facilitative rather than a totalitarian role to attain the desired outcomes ( Songling et al., 2018; Abate et al., 2020; Ji & Miao, 2020; Maksimov et al., 2020). Furthermore, past research (Abate et al., 2020; Anwar & Ali Shah, 2020) has shown that MEs often lack abilities and expertise, leading to a shortage of access to capital, lengthy, administrative start-up operations, management, business development, facilities, and ineffective legal arrangements. As a result, governments assist MEs with timely organizational and administrative training programs to boost ME productivity and creativity (Abate et al., 2020). As a result, governments have reduced MEs' administrative expenses and burdens to encourage them to innovate (Songling et al., 2018; Abate et al., 2020; Anwar & Ali Shah, 2020). Tax exemptions, incentives, investments, informatics, support networks, performance assistance, and capital resources, among other things, are available from the government to businesses (Han et al., 2017). Furthermore, the argument of the assets perspective suggests that in a volatile market, enterprises with distinctive and uncommon qualities obtain a sustained competitive advantage and superior performance over their rivals ( Han et al., 2017; Su et al., 2017; Anwar, Khan, et al., 2018). Industrial growth expansion is frequently aided by government assistance, divisions, and taxes (Anwar, Khan, et al., 2018). Establishing connections with other bodies (e.g., other firms and governmental authorities) is a key factor in firm effectiveness. Nevertheless, in growing economies like Jordan, government ties are seen as a critical predictor of long-term success (Anwar, Khan, et al., 2018; Han et al., 2017). Furthermore, it is also stated that government funding in various research and innovation initiatives can favourably increase a firm's innovative performance, which is ideal for high performance in growing markets (Anwar, Khan, et al., 2018). Monetary incentives from the government assist MEs in extending their operations, improving their performance and contribution to the economy (Anwar, Khan, et al., 2018). For example, in a growing economy like Jordan, a firm with significant backing from the government might outperform the firms with lesser support (Degong et al., 2018).

According to Songling et al. (2018), an investment opportunity with solid linkages to government and economic bodies can provide a competitive advantage in terms of performance over enterprises with weak ties to media and political figures. This is also a vital resource for an industry and a firm where the government backs its business. Such support by governmental programs can sustain a long-term competitive advantage. Thus, RBV and institutional theory can explain the positive impact on MEs performance. The firms having government-provided capital support, technology resources, legal relief for businesses, and access infrastructures have the potential to perform above the industry averages. (Abate et al., 2020; Kumar et al., 2018; Anwar, Khan, et al., 2018; Han et al., 2017). Conversely, some studies lacked awareness of government support and ME performance (Ibrahim & Mahmood, 2016; Idris & Saad, 2019). However, several studies have found no connection between MEs' performance and government funding (Khairuddin et al., 2019; Persada et al., 2020). With the previous debate in mind and our study's focus on MEs in Jordan, we proposed the following hypothesis:

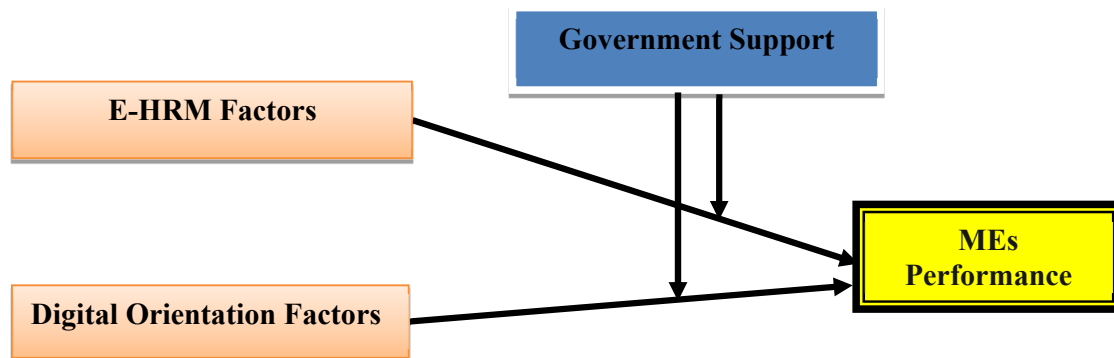
**H<sub>3</sub>:** *Government support improves MEs' performance in Amman.*

Government support gives businesses various valuable resources, including tax breaks, incentives, and earnings (Anwar et al., 2020). The assets mentioned above might have great value in underdeveloped countries due to the incomplete system of the market. It encourages enterprises to form relationships with governments to get crucial resources (Kim et al., 2016; Han et al., 2017; Kumar et al., 2018; Anwar, Khan, et al., 2018; Abate et al., 2020). Business enterprises can obtain government support after fulfilling the requirements and intentions of authorities (Willmott, 2017). With increased government worries about environmental and social issues in emerging nations like Jordan, E-HRM has become a powerful tool for gaining government support and favorable treatment (Venkatesh et al., 2016; Xia et al., 2020). According to earlier studies by Seow et al. (2021), government assistance is either active or passive. According to prior research, different types of government support can affect a company's growth and strategy (Xia et al., 2020). Active government funding could positively regulate the correlations between several characteristics of E-HRM, digital orientation, and ME performance (Ramanathan et al., 2014; Venkatesh et al., 2016; Xia et al., 2020). Active government assistance could be able to give businesses the resources they require. Since enterprises in developing nations have less critical resources, a firm that has received government backing might supply resources and capabilities for its peer organizations (Li et al., 2020). As a result, significant government assistance can improve a company's chances of forming new partnerships (Li et al., 2020; Seow et al., 2021). Yu et al. (2020) discovered that government incentives might push companies to look for novel solutions to pollution and climate change across organizational borders. According to Seow et al. (2021), government-sponsored internal control training programs can improve a business's policy, which can positively affect corporate performance (Ramanathan et al., 2014; Venkatesh et al., 2016; Xia et al., 2020).

Conversely, passive government support may help to moderate the correlations between different characteristics of E-HRM, digital orientation, and MEs performance. Compared to traditional government assistance, indirect government assistance is according to the market (Ramanathan et al., 2014; Venkatesh et al., 2016; Xia et al., 2020). It can activate many economic participants, and this helps improve the marketplace effect on resource allocation (Brandao-Marques et al., 2020). Previous research indicates that E-HRM can improve the perception and accessibility of interactions between the focus organization and its customers (Venkatesh et al., 2016; Yu et al., 2020). Recent studies have described that the government entities in developing nations have not entirely achieved the benefit of E-HRM. It is still undervalued by businesses (Kohansal et al., 2016; Li et al., 2020; Seow et al., 2021). On the contrary, there are many studies wherein government support is checked in medium enterprises, like collaborative innovation (Venkatesh et al., 2016; Abate et al., 2020; Yu et al., 2020), entrepreneurship (Ahmed, 2019), firms' development (Alghawi et al., 2019), and business success (Garcia De Lomana et al., 2019). Above discussion in view, government support seems to moderate the connection between E-HRM, digital orientation, and MEs performance (Venkatesh et al., 2016; Yu et al., 2020). Consequently, we provide the following research assumptions:

**H<sub>4</sub>:** *Government support positively moderates the relationship between digital orientation as well as ME Performance.*

**H<sub>5</sub>:** *Government support moderates the relationship between E-HRM as well as ME Performance.*



**Fig. 1.** Research Framework

### 3. Research Design and the Sampling Technique

A research design is a comprehensive plan that outlines the techniques and steps researchers take to gather and evaluate data (Zikmund, 2013). This research design is divided into qualitative or quantitative studies based on the research objectives (Malhotra, Kim, & Patil, 2006). Quantitative research interprets phenomena with the help of empirical assessments that entail numerical measurement and analysis (Zikmund et al., 2013). This study is better suited for quantitative design since it makes use of statistically based techniques to gather and analyze numerical data in order to understand the relationship between variables (Creswell, 1994). This was in line with the study's goal, which is to investigate how government support affects the relationship between E-HRM, digital orientation, and ME performance in Amman. So, the current study is quantitative, explanatory, and cross-sectional. In the present study, the organization served as the unit of analysis, and a survey questionnaire was used to collect the study's primary data. The questionnaire will be designed to gather information on the level of E-HRM and digital orientation adoption, MEs performance metrics, and the extent of government support received by the MEs. The population for current research is the total number of MEs in the state of Amman. According to the Amman Chamber of Commerce, there are 18,967 MEs in Amman. Thus, the present study's population comprises managers in 18,967 MEs in various Amman. This target population is then assessed for accessible population. Thus, the sampling frame is obtained consisting of 18,967 MEs. A sample size is a predetermined number of people or respondents chosen from a wide community to participate in a survey (Sekaran, 2013). As gathering information from the entire population is impractical, a sampling procedure was used to establish the sample size. Numerous academics agree that a statistical test's power will enable a bigger sample size (Kelley & Maxwell, 2003). This study also employed Krejcie and Morgan's (1970) a priori analysis power to select sample size, depending on the response rate scenario. The Krejcie and Morgan table for the sample size determination provided a range of populations and their corresponding sample size. Based on the total population, According to Krejcie and Morgan (1970), 377 is the sample size table. To achieve a high response rate, the researchers finally chose to distribute 537 questionnaires as suggested by Salkind, (2012) that 40% - 50% could be added to the sample size. Further it was argued by Hair et al. (2006), to generalize about the entire population, an adequate number of samples is required. Since it is thought to give every person an equal chance of being selected for the study's sample, the stratified probability sampling technique is used in this research (Sekaran, 2013). Additionally, the study used disproportionate sampling, which selects respondents without taking a specific percentage into account and draws participants from every stratum (Sekaran & Bougie, 2010). The choice to use disproportionate sampling was taken because the population sizes of certain strata were too large while others were too small. Additionally, it was done to lower data collection costs from one or more strata in comparison to other strata (Sekaran, 2003).

**Table 1**  
Population and the Sample Size

| Name of the Sectors                              | Population of ME is each | Sample size for each | Sample %   |
|--|--------------------------|----------------------|------------|
|  | sector                   | sector               |            |
| Foodstuff sector                                 | 2,858                    | 109                  | 15         |
| Electrical and electronic sectors                | 686                      | 16                   | 4          |
| Clothing, jewelry sector                         | 1,291                    | 33                   | 7          |
| Health, medicine, and supplies sector            | 1,279                    | 60                   | 7          |
| Construction and building materials sectors      | 2,827                    | 58                   | 15         |
| Cars, heavy machinery, and supplies sector       | 940                      | 19                   | 5          |
| Financial and banking sector                     | 335                      | 2                    | 2          |
| Home and office furniture and stationery sector  | 977                      | 33                   | 5          |
| Communications and information technology sector | 1,563                    | 37                   | 8          |
| Services sector consulting and others            | 6,211                    | 170                  | 33         |
| <b>Total</b>                                     | <b>18,967</b>            | <b>537</b>           | <b>100</b> |

Source: Amman Chamber of Commerce (2023)

The current study used a closed-ended questionnaire categorized into two segments: first one consists of demographic information about the participants and their organization, whereas the second section contains questions about the constructs utilized in the framework of this present study. The questionnaires of present research were structured on a five-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5). Additionally, a quick summary of both subdivisions is given below: Section A has questions about the respondent's gender, age, marital status, education, experience as well as position in MEs. Section B has questions about the construct. Three questionnaires about the performance used in other studies were adapted for the present article. The performance scale was adapted from (Grözinger, AWolff, Ruf, & Moog, 2022). In this study, E-HRM is measured using a total of twenty-four items adapted from (Al-Hawary et al., 2020). There are twenty-one (21) items measuring digital orientation adapted from Dantsoho et al., (2020). There are eight (08) items measuring government support adapted from Hossain, Ibrahim, & Uddin, (2023).

#### 3.1. Data Collection

Every completed questionnaire was personally distributed and gathered by the researcher through face to face and email. The researchers received 84 questionnaires through google drive and the remaining 225 questionnaires received face to face. With every respondent, the researcher conducted a briefing regarding the nature and goal of the study. Each respondent received assurances that the information they provided would be always kept private and used exclusively for the study. By not having

to write their names on the questionnaire, they were exempt from the requirement to identify themselves. After that, respondents had sufficient time to finish the survey. A follow-up phone call is made to remind responders to return the questionnaire if they were unable to complete it within an acceptable amount of time. The main data which is used for this research are collected from medium enterprises HR officials in Amman Jordan. As discussed, 537 questionnaires were distributed. As a result, 309 responses were obtained representing 58% were returned and found valid and therefore included in the analysis, while 228(42%) not returned (see Table 2).

**Table 2****The Response Rate of the Questionnaires**

| Response                             | Frequency/Rate |
|--------------------------------------|----------------|
| Number of Questionnaire administered | 537            |
| Returned Questionnaires              | 309            |
| Usable the questionnaires            | 309            |
| Excluded the questionnaires          | 0              |
| The Questionnaires not returned      | 228            |
| Total Response Rate                  | 58%            |
| Valid Response Rate                  | 58%            |

**4. Analysis of the Data and Data Findings***4.1. Demographic Profile of the Respondent*

This section describes the people who took part in the present study, as demonstrated in table 3. The demographic information includes the information about the people who responded. Table 2 describes the profile of the participants of current research. In demographic, the male respondents were (70.2%) and female respondents were (29.8%). The age of participants which is shown in the below table from 21 to 30 years was 20.4%, while 40.1 % were in between the ages of 31% to 40%, from 41 to 50 years were 34.3%, whereas, from 51 to above were only 5.2%.

**Table 3****Demographic characteristics**

| Variables              | Frequency | Percent | Variables                        | Frequency | Percent |
|------------------------|-----------|---------|----------------------------------|-----------|---------|
| <b>Gender</b>          |           |         | <b>Current position</b>          |           |         |
| Male                   | 217       | 70.2    | HR Manager                       | 309       | 100.0   |
| Female                 | 92        | 29.8    |                                  |           |         |
| Total                  | 309       | 100.0   | Total                            | 309       | 100.0   |
| <b>Age</b>             |           |         | <b>Numbers of years with the</b> |           |         |
| 21 to 30 years         | 63        | 20.4    | Less than a year                 | 29        | 9.4     |
| 31 to 40 years         | 124       | 40.1    | 1 to 3 years                     | 91        | 29.4    |
| 41 to 50 years         | 106       | 34.3    | 4 to 7 years                     | 90        | 29.1    |
| More than 51 years     | 16        | 5.2     | Above 7 years                    | 99        | 32.0    |
| Total                  | 309       | 100.0   | Total                            | 309       | 100.0   |
| <b>Marital status</b>  |           |         | <b>Ownership of organization</b> |           |         |
| Sigle                  | 90        | 29.1    | Individuals                      | 151       | 48.9    |
| Married                | 190       | 61.5    | Partnership                      | 42        | 13.6    |
| Widowed                | 29        | 9.4     | Limited Liability                | 82        | 26.5    |
| Total                  | 309       | 100.0   | Limited Partnership              | 16        | 5.2     |
| <b>Education level</b> |           |         | <b>Other</b>                     |           |         |
| Ph.D.                  | 6         | 1.9     | Other                            | 18        | 5.8     |
| Master                 | 83        | 26.9    |                                  |           |         |
| Degree                 | 137       | 44.3    |                                  |           |         |
| Diploma                | 46        | 14.9    |                                  |           |         |
| Certificate            | 37        | 12.0    |                                  |           |         |
| Total                  | 309       | 100.0   | Total                            | 309       | 100.0   |

*4.2. Measurement Model Assessment*

In the present study, researchers analyzed the validity as well as the models' reliability that was used to analyze the outer model, or measurement model, which was used in the study. The outer factor loadings for the full measurement model for this study are shown in Fig. 2. All the items had values significantly greater than the minimum threshold value. The findings indicate that the outer factor loadings are sufficient to allow the model to fit into the framework (Fig. 2). So, it is possible to apply the model to the next phase of analyses: reliability and validity test.

*4.2.1 Internal Consistency Reliability and Convergent Validity*

To assess the internal consistency reliability, the model's composite reliability (CR) was analyzed. Table 4 disclosed that all the values were greater than 0.57, which indicates and fulfilled the criteria (Sarstedt et al., 2020). Similarly, convergent validity is described by Hair et al. (2017) as to what extent a latent construct can define the variance in its indicators. Additionally,

Table 3 describes that 50 percent of the variance is identified by each of the three variables (AVE is > 0.50), which is greater than the threshold value provided by (Hair et al., 2017).

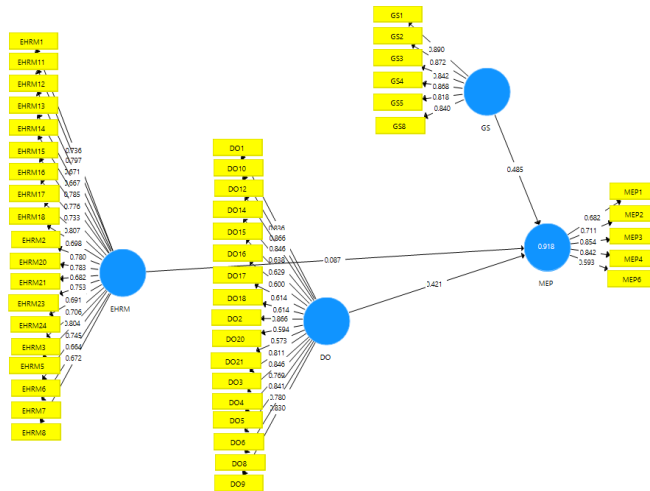


Fig. 2. Assessment of the measurement model of the study

Table 4  
Reliability and validity results

| Constructs          | Items | Loadings | Cronbach Alpha | Composite Reliability | Average Variance Extracted |       |       |       |       |
|---------------------|-------|----------|----------------|-----------------------|----------------------------|-------|-------|-------|-------|
| Digital Orientation | DO1   | 0.836    | 0.949          | 0.954                 | 0.558                      |       |       |       |       |
|                     | DO2   | 0.866    |                |                       |                            |       |       |       |       |
|                     | DO3   | 0.811    |                |                       |                            |       |       |       |       |
|                     | DO4   | 0.846    |                |                       |                            |       |       |       |       |
|                     | DO5   | 0.769    |                |                       |                            |       |       |       |       |
|                     | DO6   | 0.841    |                |                       |                            |       |       |       |       |
|                     | DO8   | 0.780    |                |                       |                            |       |       |       |       |
|                     | DO9   | 0.830    |                |                       |                            |       |       |       |       |
|                     | DO10  | 0.866    |                |                       |                            |       |       |       |       |
|                     | DO12  | 0.846    |                |                       |                            |       |       |       |       |
|                     | DO14  | 0.638    |                |                       |                            |       |       |       |       |
|                     | DO15  | 0.629    |                |                       |                            |       |       |       |       |
|                     | DO16  | 0.600    |                |                       |                            |       |       |       |       |
|                     | DO17  | 0.614    |                |                       |                            |       |       |       |       |
|                     | DO18  | 0.614    |                |                       |                            |       |       |       |       |
|                     | DO20  | 0.594    |                |                       |                            |       |       |       |       |
|                     | DO21  | 0.573    |                |                       |                            |       |       |       |       |
|                     | E-HRM | EHRM1    |                |                       |                            | 0.736 | 0.953 | 0.957 | 0.541 |
|                     |       | EHRM2    |                |                       |                            | 0.780 |       |       |       |
|                     |       | EHRM3    |                |                       |                            | 0.706 |       |       |       |
|                     |       | EHRM5    |                |                       |                            | 0.804 |       |       |       |
| EHRM6               |       | 0.745    |                |                       |                            |       |       |       |       |
| EHRM7               |       | 0.664    |                |                       |                            |       |       |       |       |
| EHRM8               |       | 0.672    |                |                       |                            |       |       |       |       |
| EHRM11              |       | 0.797    |                |                       |                            |       |       |       |       |
| EHRM12              |       | 0.671    |                |                       |                            |       |       |       |       |
| EHRM13              |       | 0.667    |                |                       |                            |       |       |       |       |
| EHRM14              |       | 0.785    |                |                       |                            |       |       |       |       |
| EHRM15              |       | 0.776    |                |                       |                            |       |       |       |       |
| EHRM16              |       | 0.733    |                |                       |                            |       |       |       |       |
| EHRM17              |       | 0.807    |                |                       |                            |       |       |       |       |
| EHRM18              | 0.698 |          |                |                       |                            |       |       |       |       |
| EHRM20              | 0.783 |          |                |                       |                            |       |       |       |       |
| EHRM21              | 0.682 |          |                |                       |                            |       |       |       |       |
| EHRM23              | 0.753 |          |                |                       |                            |       |       |       |       |
| EHRM24              | 0.691 |          |                |                       |                            |       |       |       |       |
| Government Support  | GS1   | 0.890    | 0.926          | 0.942                 | 0.732                      |       |       |       |       |
|                     | GS2   | 0.872    |                |                       |                            |       |       |       |       |
|                     | GS3   | 0.842    |                |                       |                            |       |       |       |       |
|                     | GS4   | 0.868    |                |                       |                            |       |       |       |       |
|                     | GS5   | 0.818    |                |                       |                            |       |       |       |       |
|                     | GS8   | 0.840    |                |                       |                            |       |       |       |       |
| ME Performance      | MEP1  | 0.682    | 0.791          | 0.858                 | 0.552                      |       |       |       |       |
|                     | MEP2  | 0.711    |                |                       |                            |       |       |       |       |
|                     | MEP3  | 0.854    |                |                       |                            |       |       |       |       |
|                     | MEP4  | 0.842    |                |                       |                            |       |       |       |       |
|                     | MEP6  | 0.593    |                |                       |                            |       |       |       |       |



4.2.2 Discriminate Validity

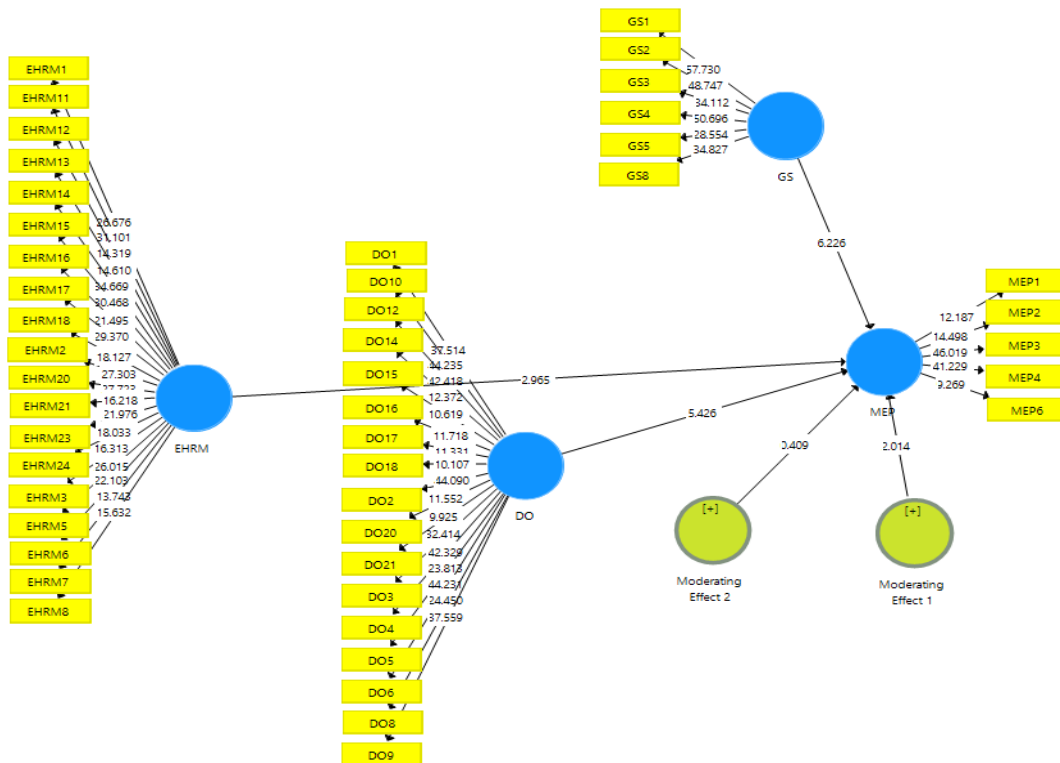
The square root of the AVE, which was provided by Fornell and Larcker (1981) describes discriminating validity. Furthermore, the value of AVE square root must be higher than the value of the latent variables, indicating a discriminating value. According to Table 4, the whole diagonal values are higher than the value of other latent variables. Similarly, the second requirement is to assess the validity of the constructs (Kline, 2015; Gold, Malhotra, & Segars, 2001). It indicates that there is no defect in the measurement model of the study. In other words, the factors taken in the present research achieved the discriminant validity.

**Table 5**  
Discriminate validity matrix

|                      | Digital Organization | E-HRM        | Government Support | ME Performance |
|----------------------|----------------------|--------------|--------------------|----------------|
| Digital Organization | <b>0.747</b>         |              |                    |                |
| E-HRM                | 0.539                | <b>0.736</b> |                    |                |
| Government Support   | 0.258                | 0.437        | <b>0.855</b>       |                |
| ME Performance       | 0.149                | 0.107        | 0.143              | <b>0.743</b>   |

4.3 Assessment of Structural Model

To follow up on the measurement model, the structural model was analyzed. As Sarstedt et al. (2019) described, a structural model helps to look at the path coefficients as well as t-values of direct and indirect links to see how they work together. Additionally, Henseler, Ringle, and Sinkovics (2009) said that t-value must be greater than 1.64 to determine the significance of the relationship and then be applied to make decisions on the hypotheses mentioned above. The study's structure model is shown in Fig. 2. PLS-SEM algorithm and bootstrapping approach were applied to measure the structural model of the study. Assessment of the structural model includes testing the relationship among the latent constructs. Fig. 3 shows the relationships (i.e., paths) between the exogenous constructs and endogenous constructs. In the structural model assessment of this study, all the direct relationships (i.e., direct hypotheses) were tested. The study also assessed the mediation as well as moderation effect between the constructs as described below.



**Fig. 3.** Assessment of structural model of the study

4.3.1 Hypotheses Testing (Direct Hypotheses)

On the other hand, Table 6, indicates that the hypotheses which were supported in this current research have a value greater than 1.64. So, out of five (05) hypotheses that were tested in this study, four hypotheses are accepted and only one hypothesis

is rejected. The first hypothesis is accepted, indicating that the relation between electronic human resource management (E-HRM) and ME performance is positive as well as significant (beta value = 0.102;  $t = 2.965$ ;  $P = 0.002$  and  $P < 0.05$ ). In a similar vein, the data support the second hypothesis, which states that government support (GS) has a substantial positive effect on performance of ME (beta = 0.444;  $t = 6.226$ ;  $P = 0.00$  and  $P < 0.05$ ) and that digital organization (DO) has a substantially and positively impact on the performance of ME (beta = 0.408;  $t = 5.426$ ;  $P = 0.00$  and  $P < 0.05$ ).

**Table 6**  
Summary of the results of Hypotheses testing

|    | Relationship | Std. Beta | Std. Error | t Values | p Values | 5.0%  | 95.0% | Decision |
|----|--------------|-----------|------------|----------|----------|-------|-------|----------|
| H1 | EHRM→MEP     | 0.102     | 0.034      | 2.965    | 0.002    | 0.756 | 0.843 | Accepted |
| H2 | DO→MEP       | 0.408     | 0.075      | 5.426    | 0.000    | 0.248 | 0.566 | Accepted |
| H3 | GS→MEP       | 0.444     | 0.071      | 6.226    | 0.000    | 0.126 | 0.224 | Accepted |
| H4 | DO→GS→MEP    | 0.132     | 0.016      | 2.014    | 0.022    | 0.201 | 0.446 | Accepted |
| H5 | EHRM→GS→MEP  | 0.008     | 0.021      | 0.409    | 0.341    | 0.017 | 0.181 | Rejected |

#### 4.3.2 Moderation Analysis

In recent years, indirect effects, or moderation analysis methodologies, such as PLS-SEM, have grown more common in social science studies. To explain the significance of moderation effects, the researcher must assume a series of interactions in which an antecedent variable influences a moderator variable, that effects on the dependent variable (Nitzl, Roldan, & Cepeda, 2016). A bootstrapping technique was used to determine the t-value outcome. Hypothesis (H4) results revealed that government support has positively and significantly moderate the relation between digital orientation and ME performance (beta = 0.132;  $t = 2.014$ ;  $P = 0.022$  and  $P < 0.05$ ). According to the analysis results, this hypothesis is accepted. Similarly, hypothesis (H5) results revealed that government support has insignificantly moderate the relation between government support and ME Performance (beta = 0.008;  $t = 0.409$ ;  $P = 0.341$  and  $P > 0.05$ ) which shows that this hypothesis is rejected.

## 5. Discussion

The research examined how electronic human resource management (E-HRM) and digital orientation correlated with ME performance. This current study aimed to see the factors influencing Amman's medium enterprises. This current study looks at the effect of E-HRM and Digital Orientation on MEs' Performance along with the moderation effect of government support in Amman. To assess their impact on the dependent variable, two independent variables, one moderated variable, and one dependent variable were chosen. According to this research goal and underlying issues, five (05) hypotheses were developed and formulated. This statistical study was conducted using software SPSS v 27 as well as PLS-SEM 3.3.2 to test the constructs. The findings and results of this current study revealed that four out of five hypotheses significantly impact on the medium enterprises in Amman. The current study revealed that E-HRM in the medium enterprises has a positive and significant impact on the ME performance which supports the hypothesis one (H1). According to the findings, an adequate level of E-HRM in medium enterprises may contribute to improvements in performance. Previous research has demonstrated a positive relationship between E-HRM and performance in medium enterprises (Girisha & Nagendrababu, 2020; Alzeaideen, 2019). The current research also discovered a favorable and statistically significant relationship between the digital orientation and ME performance, which provides support for hypothesis two (H2). Findings show that from a competitive standpoint, medium enterprises can benefit from digital orientation. Using digital and electronic HRM can also expand its reach up to the global level by bringing together its internal and external environments. Using the digital platform, a local medium enterprise can compete with other enterprises around the world. Several studies have found that more medium enterprises using digital platforms makes them more competitive and increases the performance (Al-Okaily et al., 2020; Lutfi et al., 2022).

The findings and the results of the analysis of the present study demonstrated that there is a correlation that can be considered statistically significant between the government support and performance of medium enterprises. It indicates that the third hypothesis, H3, has been confirmed. The findings show that the government policies and strategies can boost the performance of Amman's medium enterprises. According to the survey, Amman medium enterprises can improve their performance by the support of government policies. Previous research also showed that government support has a positive and significant effect on the performance of medium enterprises (Su et al., 2017; Anwar, Khan, et al., 2018; Han et al., 2017).

Additionally, the study found that government support has a positive and significant moderating impact on the association between digital orientation and ME performance in Amman. It indicates that the hypothesis four (H4) of this study is statistically supported. Prior studies also found a significant link between government support, digital orientation and performance in medium enterprises (Venkatesh et al., 2016; Xia et al., 2020). Moreover, an insignificant moderating impact of government support was found between E-HRM and performance in medium enterprises. It signifies the confirmation of hypothesis five (H5). The findings indicate that the moderation impact of government support can make an insignificant contribution to the medium enterprises. Similar and comparable findings were observed by other studies as well (Ramanathan et al., 2014; Venkatesh et al., 2016; Xia et al., 2020).

## 6. Conclusion

The current study provides efforts to investigate the effect of E-HRM and digital orientation on MEs' Performance in Amman. This study also sheds light on the moderated importance of government support on performance of medium enterprise of Amman.

The results showed that digital platform and electronic human resource management significantly contributed to improving the performance of Amman medium enterprises. It was also found that government support had a significant and positive moderated role in enhancing the level of competitiveness within the medium enterprises in the country. So, it can be concluded that higher levels of digital services and E-HRM might contribute strongly to improve performance within medium enterprises in Amman. Without any doubt, having a digital platform within medium enterprises makes a substantial and positive effect on the performance. The findings of the current study might be a valuable reference for the medium enterprises in terms of using digital services, E-HRM, and government support. Particularly, the medium enterprises in Amman should concentrate on the issue of digital orientation and offer technology-based user-friendly products and services to fulfill the customers' demands in the era of technology. It will ultimately contribute to enhancing the performance of the MEs in the long run. The findings of present research postulate a detailed knowledge and insight about digital orientation and E-HRM and performance of medium enterprises in Amman that enriches the existing literature. This study's conclusions may help scholars and researchers to examine the immediate issues with digital services, E-HRM, and the performance of MEs in Amman. Finally, due to cost and time limitations, this study concentrated only on the supply side of the medium enterprises. In other words, the study received responses only from the medium enterprise's employees, particularly the managers of the medium enterprises. Therefore, future research can be carried out to include respondents' buyers and suppliers from medium enterprises to get broader and clearer responses as well as understanding about digital orientation, E-HRM, government support and performance of medium enterprises.

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