Journal of Kyzylorda Scholarly Review

P-ISSN:3006-0265 | E-ISSN:3007-4681. Published by the Open University of Kyzylorda
Copyright © Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC-BY).
https://bulletin.ouk.kz/index.php/bulletin/index



Digital Readiness of Human Resources and Its Role in Enhancing the Quality of Financial and Accounting Decisions A Field Study of the Perspectives of Employees in Administrative, Financial, and Accounting Units at Public Universities

Fahim Aziz Majeed Al-Mayali[1], Ayat Salih Hussein Ali[*2], Hussein Muhammad Ali Kashkool[3]

[1,2,3]University of Warith Al-Anbia, College of Administration and Economics, Iraq.

[*]Correspondance: Fahimalmayalee@gmail.com , ayat.saleh@uowa.edu.iq husseinmohammed.1986@gmail.com

Abstract. The aim of this study is to analyze the role of human resource digital readiness in improving the quality of financial and accounting decisions in Iraqi universities. It is based on a field study to study the views of a sample of leaders and staff working in administrative, financial and accounting units of the Universities of Kufa, Karbala and Babylon. The importance of HRs possessing digital skills and competencies, using the modern technologies and adapting to changes in technology are all crucial to the financial and accounting decision making process and enhancing the quality of these decisions. The study adopted descriptive-analytical approach and used questionnaire as data collection tool, where 323 questionnaires were distributed and 278 questionnaires were obtained and valid for data analysis, the response rate used in this study was 86.07%. The data were analyzed by SPSS and SmartPLS software, and hypothesis testing was done using the same software. The concept of human resource digital readiness was developed in five dimensions: Digital competencies and skills, using digital technologies, readiness for change and digital adaptation, continuous digital learning and development, and digital confidence and secure handling of data. The quality of financial and accounting decisions was judged on the accuracy and soundness of financial and accounting decisions, timeliness of financial and accounting decisions, effectiveness in evaluating and choosing among alternatives, and the efficiency in the utilization of financial resources. The results showed that there was a positive effect on financial and accounting decision making, which was statistically significant at the path coefficient level of 0.832 for human resources' digital readiness. Moreover, the results showed that the sub-dimensions had varying contributions in the form of path coefficients, with the highest one being in the dimension of "readiness for change and digital adaptation" and the lowest one being in the dimension of "ability to use digital technologies. Based on these findings, the study suggests continuous digital training programs, strengthening the ability of the employees to adapt to change, incorporating data security measures, and tying digital competencies to the needs of financial and accounting processes. These would help university decision-making to be accurate and timely, and the resources efficiently deployed among the universities studied.

Keywords: Human resources' digital readiness, quality of financial and accounting decisions, digital competencies, digital adaptation, Iraqi universities

1. Introduction

The modern world is experiencing a dramatic shift in the business landscape as there are constant developments in information and communication technology (ICT) and its use for completing business processes, data processing and information exchange. These changes have transformed the demands of institutional work, with the use of digital technologies no longer being a key factor in bringing about the necessary performance improvements. Rather, now HR has to make efficient use of these technologies, harness their capacity to do tasks, adjust to technology shifts and learn skills to meet the needs of a digital world. Audrin et al. (2024) pointed to the need to create an integrated framework for the measurement of digital skills in the workplace in this context. They suggested an empirical scale addressing several aspects, such as technology usage, cybersecurity, content management, communication, collaboration, and professional development. This view underlines that digital competences of employees are not solely about the use of technology, but also about various competences that are associated with the nature of various tasks, responsibilities and organizational needs. The concept of "digital readiness" of HR staff becomes apparent: the level of knowledge, skills and abilities needed to use digital technologies, motivation to use modern working methods and ability to learn and adapt to changes in technology and organization. This readiness is important because it is a critical bridge between technical infrastructure and the capability to use it to improve processes and performance. In addition, the use of digital technologies effectively would need to be accompanied by an understanding of responsibility for the management of information, especially data that relates to institutions and finances that are crucial to be protected, accurate and confidential. Therefore, digital readiness of human resources must reflect technical capability, skills to use digital tools, willingness to change, a willingness to learn, and secure handling of data as interrelated components to understand the capacity of personnel to carry out their duties in a digital environment.

It is especially important in higher education institutions, which have a wide variety of administrative, financial and academic activities, and make use of a variety of information for operation, resource allocation and obligation monitoring. The universities need an administrative setting that can utilize information to plan, monitor, and to assess performance. In the same way, they have to have individuals within their finance and accounting team who can be proficient in handling digital systems, data processing, examining results and using that data to make reports and suggestions for management. Reliability and relevance of produced information, timeliness of information, and the ability of users to comprehend and make use of it are all important factors for the effectiveness of accounting systems in this context. Mohammed et al. have tackled this issue. (2024) The Effect of Quality of Accounting Information System on Administrative Decision Making in Banking Sector of Kurdistan Region of Iraq; the study measured the system quality using its characteristics: relevance, reliability, timeliness, verifiability and understandability. The difference of this study from the current research is that it is concerned with the readiness of human resources in the digital era, while the other study is that it relies on a scientific basis for the importance of accounting information quality in the Iraqi context.

On the other hand, the excellence of financial and accounting choices plays a crucial role in good institutional management. It is a part of spending priority, financial and investment options assessment, allocation of available resources, tracking of obligations and reduction of unnecessary spending. The information that is available to support high-quality decision-making should be accurate and relevant, and timely, and the decision makers should be able to analyze the information, interpret its meaning and implications, and consider alternatives in light of identified goals, constraints, and available capacities. Accounting information systems are thus important in delivering information that supports decisions in this regard. The usefulness of this information however will depend upon the skills of those who interact with it, in the sense of their ability to use digital tools to process, verify and interpret this information. Moreover, digital technologies alone do not ensure better decision making; it is

necessary to use these technologies purposefully and responsibly and ensure that data is accurate and procedures are followed. HR's digital readiness can be considered as a potential determinant in the quality of financial and accounting decisions in this context. It offers functions that enable the effective and efficient use of digital tasks, increase the speed of information access, enhance data management, and minimize inappropriate use of measurement tools, which leads to mistakes. In addition, a willingness to change and ongoing education can improve the skills of employees to adjust to new systems and processes and being aware of digital security can help keep financial and accounting information safe and secure. However, the nature of this relationship—and the relative impact of each of the dimensions of digital readiness on improvement in decision quality—should be examined and the hypotheses tested statistically on the data before conclusions can be drawn, whether positively or negatively; the relationship cannot be assumed and the relative impact cannot be determined without data analysis and the application of statistical testing to test the hypotheses.

Investigating this relationship is becoming a necessity in the context of Iraqi universities as it is necessary to improve institutional administration and the use of money, as well as using information better to support institutions in decision making. The research that related digital skills in the workplace, the quality of accounting information systems, and the relationship between the quality of accounting information systems and the decision-making process is covered in the existing literature, but there is a gap in the literature when it comes to the relationship between human resource digital readiness and the quality of financial and accounting decisions in the context of Iraqi universities. This does not mean that there are no studies that have previously been conducted in this area; it only highlights the need for testing such a relationship in the specific environment being studied and with specific dimensions for each of these variables and with data collected from the field in administrative, financial and accounting units.

Therefore, the purpose of this study is to study the effect of human resource digital readiness on the quality of financial and accounting decisions from the Iraqi universities studied (University of Kufa, University of Karbala and University of Babylon). The five elements of digital readiness are: digital competencies and skills; ability to use digital technologies; readiness for change and digital adaptation; ongoing digital learning and development; digital confidence and handling data safely. Four dimensions are also used to measure the quality of financial and accounting decisions: the accuracy of financial and accounting decisions; the rationality of financial and accounting decisions; the timeliness of financial and accounting decision making; and the efficient evaluation of financial and accounting alternatives; and the efficient use of financial resources. This study aims to give empirical evidence to support the analysis of the responses of the samples and to examine the relationship between the variables and their dimensions by analyzing the relationships in the sample responses so that empirical evidence can be obtained. It seeks to ascertain how much the digital readiness of HR adds to the quality of financial and accounting decisions, and provide actionable advice for university administrations that they can apply to strengthen the skills of their employees and advance their information-driven financial and accounting processes.1

2. Research Methodology

I. Research Problem

While administrative, financial and accounting activities have become increasingly digitized, the utility of these technologies requires more than just access to digital tools and systems. Instead, it relies on the willingness of human resources to use them effectively, their capacity to adapt to the requirements of a digital workplace, their willingness to keep developing their skills, and their security of data and information. This is an important issue in the financial and accounting departments of universities, where work involves high precision in data handling,

swift processing of information, effectiveness in alternative assessment and proper financial resource allocation.

The research problem in the context of this research is to study the degree of digital readiness of human resources in the context of improving the quality of financial and accounting decisions in Iraqi universities. It also delves into the different aspects of digital readiness as they relate to digital competencies and skills, using digital technologies, being open to change and digital adaptation, continuous digital learning and development, and digital confidence (including the safe handling of data). Also, it is important to research the connection between these dimensions and the quality of financial and accounting decisions, including their accuracy and soundness, their timely implementation, the efficiency of considering alternatives and the effective use of financial resources. While both are important, the interaction between the two and the degree to which the dimensions of digital readiness help explain differences in the quality of financial and accounting decisions needs evidence from the Iraqi university environment to determine the nature of the relationship between them. This is especially important, because of the variety of the activities and duties of administrative, financial and accounting units. Thus, the problem of this study is to reveal the lack of clarity about the role of digital readiness in human resources in all its dimensions in improving the quality of financial and accounting decisions in the Iraqi universities under study. This requires an investigation and statistical testing of this relationship, from a sample of leaders and staff in administrative, financial and accounting positions from the Universities of Kufa, Karbala and Babylon respectively. The overall research question is:

What is the role of human resource digital readiness in enhancing the quality of financial and accounting decisions at the Iraqi universities under study?

Significance of the Study

Theoretical Significance

1. This study adds to the literature on the digital readiness of human resources and quality of financial and accounting decisions for both variables in one analytical framework, namely in the context of Iraqi higher education institutions.
2. The study offers an analytical insight into the possible relationship between digital HR capabilities and the quality of financial and accounting decisions. Helps to understand relationship between digital skills, adaptability, continuous learning and handling data safely in relation to financial and accounting decision making requirements.
3. Digital readiness is explored through five interrelated dimensions: Digital competencies and skills; Capability to use digital technologies; Preparedness to change and adapt to digital; Ongoing digital learning and development; and Digital trust and handling of data securely. This provides the opportunity to explore the concept more deeply, and beyond just acquiring the necessary technical ability.
4. It focuses on four aspects of financial and accounting decisions which makes the quality of financial and accounting decisions a multi-dimensional concept: accuracy and rationality of the decisions, timeliness, efficient management of alternatives, and efficient use of financial resources.

Practical Significance

1. The results of this research can help the administrations of the examined universities to better understand the aspects of digital readiness that they need to focus on more, and to create training and development programmes to meet their staffs' real needs.
2. The study offers signs that can be used for better preparation, analysis and use of financial and accounting information for decision making – to increase the accuracy of information, ensure it is timely and help to frame and assess a range of alternatives.

3. The results of the analysis of the dimensions of digital readiness can be leveraged to create training programs to build practical digital skills and enhance the ability to work with electronic systems, and to promote lifelong learning and adapting to new technology.
4. The study emphasizes that universities need to be aware of the use of digital systems and that they need to develop practices and strategies for handling institutional information in a secure manner, which could motivate universities to increase and strengthen information protection measures and to create mechanisms to reduce the risks of unsafe use of digital systems.
5. Recommendations based on the actual findings can help more effectively utilize information when considering financial options and how to allocate spending, which can lead to better use of the available resources.
6. The study will allow university administrations to make decisions based on data findings instead of on general training programs that might not be relevant to the needs shown in the data.

Study Objectives

The current study is aimed to achieve a set of objectives, matching the research problem and its main question "What is the role of human resource digital readiness in improving the quality of financial and accounting decisions within Iraqi universities studied?". The tasks to be accomplished in the study are stated as follows:

1. To determine the level of HR digital readiness in the Iraqi universities studied, on the dimensions of digital competencies and skills, and the use of digital technologies, readiness for digital change and adaptation, continuous digital learning and development, and digital confidence and handling data safely.
2. The second was to assess the quality of financial and accounting decisions made in the universities studied in terms of aspects of decision accuracy and rationality, timeliness, ability to evaluate alternatives efficiently and use financial resources efficiently.
3. To examine the relationship between human resource digital readiness and quality of financial and accounting decision and determine the direction and strength of the relationship using the data collected from the field. This involves measuring the influence of HR digital readiness on the quality of decisions and explaining the variance in HR digital readiness to differences in decision quality among the universities studied.
4. Based on results of the statistical analysis, to identify which digital readiness dimensions contribute most significantly to explaining the quality of financial and accounting decisions, in order to determine the individual contribution of the dimensions of digital readiness to the quality of financial and accounting decisions.
5. The administration of universities studied promotes the digital readiness of human resources, optimizes financial accounting decision making processes and increases the efficient use of financial and information resources.

Study Population and Sample

The study population includes leaders and staff in the administrative, financial and accounting units of the Iraqi Universities under study which are the Universities of Kufa, Karbala, and Babylon. This selection is based on the nature of the work on which they are involved and on the fact that they have a direct relationship with the digital systems, data and information which underlie institutional decisions. A purposive sampling method was used in this study to meet the target of the study to answer the main research question. The questionnaire was developed for those who had the required experience and knowledge in administrative, financial and accounting activities within the universities under study, keeping in mind the requirements of the study's variables. A total of 323 questionnaires were distributed, 278

having been returned and were used for statistical analysis and the response rate was 86.07%. Statistical analyses of all valid questionnaires were used to test the hypothesis of the study, explore the nature of the relationship between digital readiness of human resources and the quality of financial and accounting decisions, and examine the impact.

Spatial, Temporal, Human, and Thematic Scope

The four dimensions of scope of the current study are interrelated. The study was conducted in the spatial scope of the Universities of Kufa, Karbala and Babylon of Iraq. The human scope of the study is the leadership and staff of the administrative, financial and accounting units of universities under study, against whom the questionnaire was directed, as the nature of their work is relevant to the study. Thematic scope means the analysis of the role of human resource digital readiness, including aspects of digital competencies and skills; use of digital technologies; preparedness for change and digital adaptation; continuous learning and development in the digital; digital confidence and safe handling of data, and their connection with the quality of financial and accounting decision making. This quality is evaluated based on decisional accuracy and rationality, decisional timeliness, the efficient evaluation of alternatives and the efficient use of financial resources. Temporal scope is the time frame between the distribution and retrieval of the field study data, and should be specified by actual dates of questionnaire distribution and retrieval.

Study Hypotheses

H1: There is a significant positive impact of human resources' digital readiness on the quality of financial and accounting decisions.

This main hypothesis branches into the following sub-hypotheses:

H1A: There is a significant positive impact of digital competencies and skills on the quality of financial and accounting decisions.

H1B: There is a significant positive impact of the ability to employ digital technologies on the quality of financial and accounting decisions.

H1C: There is a significant positive impact of readiness for change and digital adaptation on the quality of financial and accounting decisions.

H1D: There is a significant positive impact of continuous digital learning and development on the quality of financial and accounting decisions.

H1E: There is a significant positive impact of digital confidence and secure data handling on the quality of financial and accounting decisions.

3. The Theoretical and Conceptual Framework of the Study

The Independent Variable – Digital Readiness of Human Resources

1. The Concept of Digital Readiness of Human Resources

Digital readiness of HR is a basis of a strategic component in the times of digital transformation. It goes beyond infrastructure and cutting-edge technological systems; it's also the ability and willingness of the human factor to embrace new technologies and incorporate them into the workplace. From a linguistic and academic perspective, 'readiness' refers to a state of being prepared and ready to deal with changes in the future and/or the present. From a human resources perspective, digital readiness is the degree of alignment between employees' cognition, skills and behavior with the needs of a smart digital environment (Silva et al., 2024: 3286).

The notion of digital readiness of human resources also includes the extent of motivation, readiness to take part, and efforts by employees to drive digital transformation processes in the organization, which in the end defines their practical actions and their attitude to new technologies. The concept brings together the cognitive aspects (perception and awareness of the importance of technology) and affective aspects (positive psychological attitudes and rejection of resistance to change). It also includes behavioural components, which relate to the use and use of software and digital systems in reality (Höyng & Lau, 2023: 138).

The concept of digital readiness assumes a crucial dual meaning: on one hand, the adaptability of the individual; on the other hand, his/her overall technical skills. This means that employees must be "digital fluent," meaning that they must be highly skilled in processing data, creating ideas, and using advanced technical tools effectively and efficiently to meet an organization's strategic objectives (Thite, 2020: 7).

Digital readiness, in large specialized fields like maritime transport and logistics where a disruption may happen, is expressed in the congruence of the human resources' skillset and the new technical demand of the Fourth Industrial Revolution. The workforce's job is evolving from manual to digital monitoring and handling of automated, intelligent systems, like Electronic Data Interchange (EDI), electronic port portals (e.g., INAPORTNET) and automated shipment tracking. This change requires strengthening the human resources to meet the rapid changes in the sea industry.This change requires strengthening the human resources to correspond to the rapid changes in the sea industry (Rusmanto & Supartini, 2024: 36).

This is not just about having individual technical skills; it's about the organizational structure and mindset being prepared. Digital readiness of HR is based on clear HR digital talent management strategies, driving HR leaders to facilitate change, and an organization culture that promotes continual learning, reskilling, and upskilling. It's an integrated framework to fill skill gaps in each department and to make it easier to prepare for a digital workplace (Ekhsan et al., 2026: 2).

In addition, modern studies show that HR preparedness for digitization is a necessary condition for achieving success in digital transformation projects in organizations. Failure to evaluate and build human readiness can result in a substantial failure rate of many technological transformation efforts. This is attributed to the occurrence of skill gaps, reluctance towards change and the lack of an organizational culture that fosters technological development (Satiti, 2025: 70).

The term "digital readiness" of human resources signifies the psychological, cognitive, and behavioral preparedness, digital skills, capabilities, and technical fluency of an organisation's workforce needed to effectively and efficiently leverage and use modern digital systems and applications. This readiness allows an organization to succeed with a seamless digital transformation and maximize its institutional performance.

2. Dimensions of Digital Readiness in Human Resources

Academic research and literature show that preparing HR for digital is a complex issue: it needs to align technical, organizational and human dimensions to guarantee the effectiveness of digitalization. The most salient dimensions, often referred to in pertinent studies, are the following (Michelotto & Joia, 2024):

A. **Digital Competencies and Skills**: his dimension includes knowledge and skills which employees need to operate in the digital environment. These skills span from knowledge of technical language and digital literacy to more specific skills like working with big data or using enterprise management software and digital communication. These skills are the most important that an individual can use to perform and complete tasks without technical barriers.
B. **Ability to Leverage Digital Technologies**: This dimension is not about the theoretical knowledge of the technology, it's about how to use digital solutions as a tool for the organization's everyday work and activities. It gauges the effectiveness of employees in aligning current software, cloud systems, and process automation solutions with their jobs, and demonstrates how much they can power up the technology to improve efficiency and speed up decision-making.
C. **Readiness for Change and Digital Adaptation**: This dimension focuses on the psychological and behavioral aspects of readiness. It includes the willing participation of the workforce in moving from an analog workplace to one that is digital, along with reducing

the resistance and fear of technology. This readiness can be divided into three areas: cognitive readiness (accepting the inevitability of digital change), emotional readiness (maintaining positive attitudes towards innovation) and behavioural readiness (engaging positively with hands-on change processes).

D. **Continuous Digital Learning and Development**: Indicates the dynamic and non-static aspect of digital readiness. It demands the organization and person to continuously learn, reskill and enhance their competency to meet the fast pace of technological changes. This is done by delivering training programmes according to identified needs, based on practice, and by applying a lifelong learning approach – so that any identified skill gaps are filled at all times.

E. **Digital Trust and Secure Data Handling**: This dimension is about everyone's awareness of the importance of cybersecurity and privacy protections, and how they understand how to be mindful and act with careful awareness when handling organizational data and sensitive information. Digital trust helps build a safe workplace and allows for seamless data sharing, with no need to worry about compromising operations and data.

The Dependent Variable – Quality of Financial and Accounting Decisions

1. The Concept of Quality in Financial and Accounting Decisions

Financial and accounting decisions are key internal functions for achieving organizational effectiveness in today's institutions. It indicates how much a management's decisions can meet strategic and financial goals, most efficiently and at the lowest risk. This quality is not only reflected in the final numeric results, but also in the exactness of the processing of economic transactions, the analysis of the economic indicators, and the adaptation of this analysis to the knowledge needs of the decision maker. Financial or accounting decision that is of high quality is a decision based on the transformation of raw accounting data that helps to minimize uncertainty in the business environment and directs managers in the right way of business operation and investment (Rotaru et al., 2022: 160).

Bounded rationality and risk management theories can be used to explain how financial decision quality is reflected by diminished information asymmetry and minimized differences between expected and actual results. The use of reliable, well-documented financial and accounting information reduces information-related risks, increases the liquidity of the companies and increases the financial valuation of the organization in the market. This allows the management to reduce the possibility of falling into the trap of biased errors and arbitrary estimates, and ensures that each decision is based on a rational, defensible and verifiable reasoning that is accountable to the stakeholders (Rai, 2024: 13). A broad, multi-level scope of financial and accounting decisions in an organization is a key feature of quality. It is not confined to long-term decisions on structures, but it encompasses four interrelated areas, namely, operational decisions (related to cost management, pricing and daily production decisions), investment decisions (concerning project evaluation and asset allocation), financial decisions (concerning capital structure and working capital management) and accounting decisions (concerning the choice of appropriate policies and standards for discretionary policies). High quality in this system is reached when all these levels are managed efficiently with respect to the organization's sustainable development and financial stability (Rotaru et al., 2022: 162).

In addition, the quality of financial and accounting judgements is central to the quality of the financial reports and statements, which in turn is fundamental to the quality of financial and accounting decisions, and is dependent on how well financial reports and statements comply with the qualitative characteristics outlined in global conceptual frameworks, including those published by the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). Relevance (both predictive value and confirmatory value) and faithful representation (free from bias and material error) are all fundamental

characteristics that are positively related to quality. They are complemented by the improvement of attributes such as: verifiability, understandability and comparability, which add a substance to the decisions and give them the power of positive effects on business performance (Rai, 2024: 3). The definition of quality in financial and accounting decision-making has expanded to new heights in the digital transformation and artificial intelligence age. This is because Accounting Information Systems (AIS) and digital solutions can effectively conduct complex financial modelling and future simulations of scenarios. When an organisation is able to integrate financial data with operational data in real-time, the quality of a decision is significantly enhanced. This helps decision makers to have a proper assessment of the investment options available to them, manage finances, and cut down on the operational costs of doing it manually, thereby improving the chances of the organisation to succeed and respond to the market fluctuations effectively (Dewi et al., 2020: 342).

The quality of financial and accounting decisions, according to the researchers, is the capability of management to make accurate and rational financial and accounting decisions and strategies. The decisions are based on existing accounting data and information which are relevant, reliable and timely, and the evaluation of the alternatives is efficient and financial resources are used optimally. This, in turn, reduces risk and operating mistakes, and keeps the company's strategic goals on track with maximum effectiveness.

2. Dimensions of Financial and Accounting Decision Quality

The quality of financial and accounting decisions is based on a set of integrated dimensions that assess decision inputs, processes, and final outputs to ensure institutional success (Monteiro et al., 2022). The academically recognized dimensions are as follows:

A. **Accuracy and Rationality:** This dimension is characterized by the lack of error and subjectivity in the financial decision, the use of an objective analysis of the actual data of accountancy. This gives the decision-maker greater confidence, and also minimizes the risk of going off-track or losing money because of inaccurate estimates.

B. **Timeliness:** The point of this dimension is that financial information and reports are available at the correct time and can be used by management to make decisions and adjust the way the business is operated before it is too late. Withholding financial data robs it of its predictive power and hampers the organisation in capturing opportunities and reducing risks.

C. **Efficiency in Evaluating Alternatives**: This dimension deals with the decision-maker's capacity to consider all possible avenues for investment or funding and compare the costs and likely benefits of each. The objective is to find a solution that will not only meet the financial need but also provide the greatest return at an affordable price.

D. **Efficiency in the Use of Financial Resources**: It refers to the efficiency of a financial decision in allocating available capital and assets to the most effective use, and to avoiding financial waste, while maximizing cash flow and working capital efficiency, and thereby maximizing the return on investment and enhancing the organizations' financial sustainability.

5. Practical Framework

Statistical Methods

The study employs descriptive analysis—including measures of central tendency and dispersion—using the SPSS software. Additionally, Partial Least Squares Structural Equation Modeling (PLS-SEM) is utilized via the SmartPLS software.

The study relies on statistical methods designed to summarize the collected data through indicators such as the arithmetic mean and standard deviation. To test the hypotheses, path analysis is conducted using the SmartPLS software.

1. **Coding of Study Items**

The following table presents the coding for the scale items:

Table (1) Coding of items

Variable	Dimensions	Coding	Number of items
Digital Readiness for Human Resources **QWE**	Digital competencies and skills	QA	4
	Ability to employ digital technologies	QS	4
	Readiness for change and digital adaptation	QD	4
	Continuous digital learning and development	QF	4
	Digital confidence and secure handling of data	QV	4
Quality of Financial and Accounting Decisions **DFT**	Accuracy and soundness of decisions	DT	3
	Appropriate timing	DD	3
	Effectiveness in evaluating and choosing between alternatives	DR	3
	Efficiency in the use of financial resources	DZ	3

Source: Prepared by the researchers

2. Descriptive Analysis

Using the SPSS software, the necessary indicators for describing the data—including the arithmetic mean and standard deviation—were obtained. These are presented in Table (2), which illustrates the distribution of the variables within the studied sample.

Table (2) Descriptive analysis of the study variables

Standard deviation	Arithmetic Mean	Distance
4.05	**0.743**	**QA**
4.32	**0.754**	**QS**
4.54	**0.787**	**QD**
4.55	**0.779**	**QF**
4.32	**0.732**	**QV**
4.65	**0.743**	QWE
4.22	**0.765**	**DT**
4.56	**0.798**	**DD**
4.43	**0.768**	**DR**
4.32	**0.749**	**DZ**
4.41	**0.787**	DFT

Source: SPSS program output

3. Evaluation of the Measurement Instrument

To verify the capability of the adopted questionnaire to measure the research variables, the criteria recommended by Hair et al. (2017) were employed, as follows**:**

A. Cronbach's alpha (minimum threshold: 0.7)
B. factor loadings (minimum threshold: 0.6)
C. average variance extracted (AVE) (minimum threshold: 0.5).

Journal of Kyzylorda Scholarly Review
P-ISSN:3006-0265 | E-ISSN:3007-4681
https://bulletin.ouk.kz/index.php/bulletin/index.php

Table (3) presents these indicators, with the results demonstrating that they fall within acceptable limits**.**

Table (3) Indicators of the measurement instrument

AVE	Cronbach's Alpha	Saturations	Paragraphs
0.598	0.776	0.776	QA1
		0.769	QA2
		0.743	QA3
		0.754	QA4
		0.709	QS1
		0.765	QS2
		0.723	QS3
		0.743	QS4
		0.827	QD1
		0.798	QD2
		0.776	QD3
		0.789	QD4
		0.811	QF1
		0.721	QF2
		0.754	QF3
		0.876	QF4
		0.789	QV1
		0.719	QV2
		0.721	QV3
		0.802	QV4
0.565	0.747	0.721	DT1
		0.773	DT2
		0.722	DT3
		0.743	DD1
		0.743	DD2
		0.815	DD3
		0.810	DR1
		0.778	DR2
		0.775	DR3
		0.802	DZ1
		0.789	DZ2
		0.799	DZ3

Source: SmartPLS software output

4. Hypothesis Testing

The SmartPLS software was used for hypothesis testing; Table (4) presents the results of the path analysis.

Table (4) Results of the hypothesis testing for the study's main and sub-hypotheses

Result	p Value	t Value	Path coefficient	Hypothesis
Agreeing	0.000	34.334	0.832	H1
Agreeing	0.000	3.542	0.365	H1a
Agreeing	0.000	2.763	0.276	H1b
Agreeing	0.000	2.982	0.432	H1c
Agreeing	0.000	2.880	0.376	H1d
Agreeing	0.000	3.098	0.398	H1B

Source: SmartPLS software output

Based on the results presented in Table (4), all hypotheses are accepted, as the t-value is greater than 1.96 and the p-value is less than 0.05.

Conclusions

The results of the statistical analysis indicate the specifications of human resources and digital readiness to have a statistically significant relationship to the quality of financial and accounting decisions with the total path coefficient (beta = 0.832) in the estimated model to have a high positive correlation, highlighting the significance of considering digital readiness as a key variable relating to the quality of financial and accounting decisions in the universities studied. The descriptive results show a good preparedness of human resources for digitalisation, the arithmetic mean for the overall variable is 4.65, the study respondents show a high perception of the level of digital readiness in the university context. Furthermore, the results show that the quality of financial and accounting decisions has an arithmetic mean of 4.41, which is high, and this reflects a positive assessment, but it reminds that the practices applied must be developed to ensure the accuracy of the decisions, the timely decisions, the better assessment of the alternatives, and the better utilisation of the financial resources. The analysis of the individual dimension shows variability in the estimated path coefficients for HR digital readiness; as shown in the hypotheses table, the highest path coefficient was for the dimension "readiness for change and digital adaptation" (0.432), indicating the importance of the willingness of staff to adapt to technical and organisational changes in explaining the quality of financial and accounting decisions. Positive path coefficients are found for continuous digital learning and development, digital confidence and handling data safely and securely, and digital competencies and skills, thereby highlighting digital readiness as a multi-faceted concept involving technical competencies, ongoing learning and data use responsibilities. In contrast, the dimension with the lowest path coefficient was the ability to use digital technologies (0.276), which indicates the need to analyse the extent to which employees can apply their digital skills and knowledge in practice in their daily jobs. Descriptive results show differences in the dimensions of digital readiness, with a mean of 4.54 for "readiness for change and digital adaptation" and a mean of 4.05 for "digital competencies and skills", indicating the importance of both an applied approach to gain digital skills and a positive attitude to adaptation. Results also indicate differences across decision quality dimensions, with "timeliness" having the highest mean score (4.56) followed by "accuracy and rationality of decisions" (4.22), highlighting the significance of maintaining accurate, analysed, and verified information while providing data in a timely manner. Collectively, these results reaffirm the importance of developing digital HR competencies within administrative, financial and accounting departments and using the statistical findings to develop targeted professional development initiatives instead of deploying systems without considering their effective use. To make these findings operational, university administrations should develop an integrated program for digital readiness across the five dimensions of digital readiness, and prepare annual job-specific training plans monitored by the percentage of training completed through the cooperation of HR and IT, and improve applied training on digital financial and accounting systems (including electronic reporting, data processing, and information verification) monitored by the level of actual system usage under the guidance of Finance, Accounting, and IT units. University leadership should enhance the preparedness for change and digital adjustment by involving employees in the renewal of processes and systems, explaining the advantages of change, and providing technical and administrative help. This can be measured by the participation in the development initiatives organised by the corresponding departments and heads of units. Manage HR and track the number of implemented programs and assessment results, to drive continuous digital learning and development through annual learning plans, e-learning programs, practical training, knowledge sharing and periodic skill

assessments. Regular awareness initiatives, training on information protection, access rights management, data validation and incident reporting are carried out to enhance data security and digital trust, monitored by IT and relevant units based on information security audit results. "Processes should be reviewed and audit/reconciliation mechanisms should be used to minimise errors before approval. "Finance and Accounting units should monitor the rate of recorded errors or corrections. Streamlining report flows and setting strict deadlines across units should ensure timeliness of information and decisions. Percentage of reports completed within specified deadlines. We need to enhance the evaluation of financial alternatives by applying standardised templates that evaluate costs, benefits, risks, and projected results that Finance units and leadership will track through the percentage of decisions supported by documented analysis. Digital instruments should be used to enhance efficiency in the use of financial resources by tracking spending, analysing deviations, identifying waste and linking allocations to current priorities, as measured by Finance and Planning units through deviation reports and corrective actions. There should be a mechanism of periodic monitoring and evaluation through joint committees to monitor staff levels of digital skills, system usage, data quality, timeliness of reports and accuracy of procedures. Follow-up reports and implementation rates should be used to revise training and take corrective actions. Moreover, during the digital system development, joint task forces from the HR, Finance, Accounting and IT units should be formed to ensure that the technical solutions fit the needs of users and provide them with effective support. In the end, future research should broaden the scope to include larger samples of Iraqi universities and other variables like accounting information quality, Digital Government, and user proficiency in an effort to verify and extend the relationships found in the current study.

References

Audrin, B., Audrin, C., & Salamin, X. (2024). Digital skills at work—Conceptual development and empirical validation of a measurement scale. Technological Forecasting and Social Change, 202, Article 123279.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). SAGE Publications.

Hamdan, M. K., & Sankari, A. (2023). The role of accounting information systems in making administrative decisions: An applied study on a sample of Iraqi banks operating in Salah al-Din Governorate. Tikrit Journal of Administrative and Economic Sciences, 19(64, Part 2), 525–548.

Iselin, E. R. (1996). Accounting information and the quality of financial managerial decisions. Journal of Information Science, 22(2), 147–153.

Michelotto, F., & Joia, L. A. (2024). Organizational digital transformation readiness: An exploratory investigation. Journal of Theoretical and Applied Electronic Commerce Research, 19(4), 3283–3304.

Mohammed, A. S. H., Salih, K. H., & Sangawi, S. S. (2024). The impact of accounting information system quality on administrative decision-making in the banking sector in the Kurdistan Region/Iraq. Iraqi Journal for Administrative Sciences, 20(82), 22–41.

Theres, C., & Strohmeier, S. (2024). Consolidating the theoretical foundations of digital human resource management acceptance and use research: A meta-analytic validation of UTAUT. Management Review Quarterly, 74(4), 2683–2715.

Alotaibi, N., Wilson, C. B., & Traynor, M. (2025). Enhancing digital readiness and capability in healthcare: A systematic review of interventions, barriers, and facilitators. BMC Health Services Research, 25(1), Article 500. https://doi.org/10.1186/s12913-025-12663-3

Ekhsan, M., Badrianto, Y., Suwandi, S., Hermawan, H., & Septiani, A. (2026). Strategic human resource capabilities for digital transformation: Linking talent, leadership, competence and

readiness to technology adoption. SA Journal of Human Resource Management, 24, Article a3327. https://doi.org/10.4102/sajhrm.v24i0.3327

Höyng, M., & Lau, A. (2023). Being ready for digital transformation: How to enhance employees' intentional digital readiness. Computers in Human Behavior Reports, 11, Article 100314. https://doi.org/10.1016/j.chbr.2023.100314

Jecha, A. S., Ali, A. M., & Mussa, M. H. (2026). When readiness fails: A TOE–TAM mixed-methods analysis of AI-enabled HR digitalization in a resource-constrained small island context. Frontiers in Human Resource Management, 12, 102091.

Michelotto, F., & Joia, L. A. (2024). Organizational digital readiness dimensions and criteria: A systematic literature review. Journal of Theoretical and Applied Electronic Commerce Research, 19(4), 3286–3310.

Satiti, R. P. (2025). Human resource readiness in facing the implementation of digital technology: A study of training needs and competency development. LIMEEMAS Journal: Jurnal Ilmiah Pendidikan, 3(1), 69–88.

Thite, M. (2020). Digital human resource development: Where are we? Where should we go and how do we go there? Human Resource Development International, 25(1), 87–103. https://doi.org/10.1080/13678868.2020.1842982

Aladwan, M. (2024). Sustainable accounting information and enhancement of quality for financial decision making. International Journal of Productivity and Quality Management, 43(4), 440–458.

Al-Okaily, M., Alghazzawi, R., Alkhwaldi, A. F., & Al-Okaily, A. (2024). The effect of digital accounting systems on the decision-making quality in the banking industry sector: A mediated-moderated model. The TQM Journal, 36(2), 512–530.

Mohammed, M. M. (2024). The role of financial and accounting information in the administrative decision making process (Master's thesis). Institute of Graduate Studies, Sakarya University, Turkey.

Monteiro, A. P., Vale, J., Leite, E., Lis, M., & Kurowska-Pysz, J. (2022). The impact of accounting information system quality on decision-making success and non-financial performance. International Journal of Accounting Information Systems, 45, Article 100557. https://doi.org/10.1016/j.accinf.2022.100557

Rai, P. (2024). Financial accounting information quality on decision making on finance company (Master's dissertation). Faculty of Management, Tribhuvan University, Nepal.

Rotaru, D., Mihaila, S., & Codrean, V. (2022). The role of financial-accounting information in the decision-making process. Journal of Social Sciences, 5(2), 155–163. https://doi.org/10.52326/jss.utm.2022.5(2).14

Kashkool, H. M. A., Haboobi, M. N. H., Al-maliki, N. A. Y., Al-Hamami, Z. M., & Khudair al-saadi, H. A. A. (2026, February). Digital Security Awareness and its Impact on the Sustainability of Digital Marketing Operations: A field study on the OpenSooq platform in Iraq. In Proceedings of the 2026 2nd International Conference on Computing and Emerging Sciences (pp. 332-337).

Kashkool, H. M. A. K., Al-Maliki, N. A. A. M., & Ali, A. I. G. F. M. (2026). The impact of intellectual rent management on the development of sustainable education strategies in academic institutions: An exploratory study of the opinions of a sample of professors from Iraqi private universities. Assistant. Sulaimani Journal for Humanities, 527-546

Al-Taie, Y. H., & Kashkool, H. M. A. (2025). Digital Marketing Physiognomy and Their Impact on Marketing Future Products. Academia Open, 10(2), 10-21070

Abdullah Yassen Al-Maliki, N., Hussein Al-Hlaly, F., Muhammad Ali Kashkool, H., & Faisal Mohammed Ali, G. (2026). The Role of FinTech in Enhancing the Quality of Sustainable Banking Operations. AL-Qadisiyah Journal For Administrative and Economic sciences, 26(Special 1), 254-260.

Al-Maliki, N. A., Kashkool, H. M. A., Nabeel, M. M. A. H. M., Haboobi, H., & Al-Shammari, F. M. WARITH AL-ANBIYAA UNIVERSITY.



Fayyad, S. R. A., Kashkool, H. M. A., & Yassen, N. A. (2021). Knowledge-Supporting Culture and Its Role in Improving Faculty Skills during Digital Learning to Confront the Corona Pandemic Analytical Study of the Views of a Sample of Iraqi University Professors. Kut University Journal of Human Sciences, 2021 (2021), 361-378.