



Bridging Human Resource Management and Project Management: A Project-Based Approach to Recruitment Efficiency

*Fatima Jassem Mohammed, Mounir El Khatib**

Hamdan bin Mohammed Smart University, School of Business and Quality Management, Dubai, UAE

**Corresponding Author*

ARTICLE INFO

Keywords:

Recruitment Efficiency,
Project Management, Hiring
Process, Human Resource
Management, Time
Management

Received: Mar, 02, 2026

Accepted: May, 28, 2026

Published: Jun, 25, 2026

ABSTRACT

The importance of recruitment in modern organizations has been increasing with the increased competition for skilled labor and efficient workforce management. A significant number of organisations are facing the problem of delays in recruitment, lack of communication and coordination, candidates dropping out and ineffective planning and this creates a negative impact on their organisational performance and recruitment. This research aims at exploring the possibilities of improving the hiring efficiency of the recruiting processes by using principles of project management. The research focuses specifically on the impact of project planning, communication management, project coordination and time management on the effectiveness of the recruitment process. The method of the study is qualitative research with the philosophy of interpretivist and approach is inductive. Five semi-structured interviews were conducted with HR managers, project managers and recruitment specialists involved in aspects of the recruitment and project coordination processes. Purposive sampling was utilized and those who had the required professional experience were selected. Thematic analysis was used to identify patterns and themes that emerged from the data collected to understand common themes in recruitment planning, the communication barrier, recruitment delays, and project management applications in recruitment. Findings showed that principles of project management do have a favorable influence to the efficiency of recruitment process regarding planning, responsibility, communication, and monitoring and coordinating processes of recruitment process. The structured recruitment processes and efficient time management were also noted as factors that helped minimize delays and enhance the recruitment journey. However, the results also show that an over-formalized approach can also limit flexibility in recruitment in times of crisis. Overall, the study adds to the literature in both the human resource management and project management fields as a contribution to the qualitative description of recruitment as a project-based organizational activity, and with practical suggestions for enhancing recruitment efficiency in modern organizations.

1. INTRODUCTION

Recruitment and hiring from a strategic perspective have become more significant in the modern world of work due to increasing competition for skilled workers and changing

workplace demands [1]. In today's competitive labor market, organizations must effectively attract, select, and retain individuals with the talent needed to ensure operational efficiency and

organizational performance [2]. New approaches to hiring have been called out for being slow, expensive, and ineffective in the event that there is a communication gap, coordination problem, or delay in decision making during the hiring process [3]-[5]. With the growth and operations of organizations in a dynamic business environment, recruitment is no longer considered as just an administrative activity in human resource [6]. It, however, needs more structured planning, scheduling, coordination, resource allocation and monitoring as in project management processes [7]-[10]. The increasing digitalization of recruitment and the growing demand for highly skilled employees have further intensified the need for more organized and strategic hiring approaches within organizations [11].

To achieve the recruitment goals with the required timelines and budgets, the growing complexity of recruitment activities has led organisations to embrace project management principles to make recruitment more efficient [12]. Organizations can minimize hiring delays, enhance HR team and departmental manager coordination, and manage recruitment-related uncertainties better with project management practices including project planning, communication management, time management, and risk management [13]. Recruitment activities often have several stages with several time constraints, multiple stakeholders and operational risk such as candidates dropping out, scheduling conflicts, budget constraints, and more, which are similar to project-based activities [14]. Thus, the use of project management techniques in recruitment processes could improve the organization's efficiency and increase hiring outcomes. Furthermore, organizations are increasingly recognizing that effective recruitment management can contribute to employee retention, workforce stability, and long-term organizational success [15]-[20].

Many companies still find that even with technological innovations and strategic HR initiatives, the recruitment process is inefficient, impacting organizational productivity and the recruitment outcomes [21]. If they are not structured and coordinated, there could be delays in recruitment, high recruitment costs, and lower candidate satisfaction levels [22]-[25]. Often, recruitment processes take longer than anticipated

because of lack of communication, scheduling, and resource management [26]. Despite there is a number of researches done on the process of recruitment and on principles of project management individually, few studies have explored the research on recruitment as a management activity of a project [27]-[30]. There is still a gap of researches investigating the feasibility on application of project management principles in improving effectiveness of hiring process of an organization [31]-[36].

This research is thus trying to fill the gap and examine the contributions that project management principles would give to improve effectiveness of hiring process of an organization in its recruitment procedures [37]. This study tries to investigate on the relationship between project planning and recruitment process, analyze problem regarding communication and coordination among staff involved in recruitment process, evaluate the importance of time management to an effective recruitment process and finally look into the contribution that project management practices will have towards recruitment success [38][44].

This research is important because it makes an original contribution to the literature of human resource management and the project management literature by combining concepts of both disciplines [45]. It could be useful to HR professionals and management for a better application of recruitment procedures in their organization using structured management methods and effective principles of project management [46]. It could even serve to provide an empirical perspective for an organization hoping to minimize lead-time in recruitment, coordinate members better, and recruit successfully [47]-[50]. It is important due to increased interest in strategic recruitment process and researcher's academic curiosity in assessing impact of project management practices to modern HR functions.

2- LITERATURE REVIEW

2.1 Recruitment and Hiring Efficiency

Recruitment efficiency is the capability of an organisation to recruit suitable candidates within a suitable time and cost and ensuring that the quality of the recruitment outcomes is maintained [51]-[55]. The significance of effective recruitment has come into focus as organisations are reliant on

competent employees to ensure operational performance and to remain competitive in a dynamic business environment [56]. Strategic human resource management literature further suggests that effective recruitment contributes directly to organisational competitiveness and long-term workforce development [57]-[60]. Time-to-hire, cost-per-hire, and quality-of-hire are typical performance metrics used to measure recruitment efficiency [61]. The emphasis of quality-of-hire involves identifying candidates who will bring a positive contribution to the organization's functioning and future success [62]-[66]. [1] also suggest that effective recruitment has a further impact on retention and productivity of employees and sustainability of the organization. A number of studies have been conducted that suggest that recruitment efficiency should focus on the quickest and least expensive method to avoid as much as possible the negative impact of a vacant position on operations [67]-[70]. Other studies, however, have focused on the quality of recruitment and employee-job fit, rather than speed of hiring, with the assertion that hasty decisions in recruitment could lead to increased employee turnover and decreased organizational productivity [68]-[73]. While effective hiring practices can lower recruitment expenses and boost productivity, making a rush to hire can have a detrimental impact on the hiring process and the choices made [74]-[78]. [3] also suggests that modern HR practices should not just be about speed and cost and be aligned with the other activities of an organisation.

2.2 Recruitment Challenges in Organizations

Many recruitment issues regularly plague organizations and hinder their hiring process as well as organizational performance [79]-[84]. Some common recruitment problems include poor communication between Human Resources and the Hiring Manager is poor, delays in recruitment activities, lack of coordination among stakeholders, candidate drop-off, and poor planning in hiring [85]-[88]. Many traditional recruitment systems lack a structured process and communication channels, which can be detrimental to productivity and the length of time it takes to recruit. [89] indicate that poor recruitment communication can have a negative impact on candidate perceptions of the organisation and can lead to a decrease in

applicant engagement in the recruitment process [90]-[94].

It is generally recognised that systems of recruitment that include planning and coordination are more effective than traditional systems of recruitment. Organized recruitment frameworks can positively impact on communication, delay, and recruitment activities are managed better, as suggested by the research [95]. Another huge problem is candidate withdrawal, which can be caused by the long process of recruitment [96]. Additionally, [6] suggest that companies that go beyond the traditional recruitment process and make it more technology enabled and structured, can potentially better coordinate and minimize hiring inefficiencies [97].

2.3 Project Management Principles in Recruitment

As recruitment activities grow more complicated, organizations have taken to using project management principles to enhance hiring effectiveness and organization performance [98]. The recruitment process becomes more like a project as it has specific goals, a deadline, stakeholders, resource management, monitoring, and risk management [99]. To framework the recruitment activities and minimize operational inefficiencies, project management principles like project planning, scheduling, communication management, task allocation, monitoring and control can be implemented [100]. Structured planning and scheduling will allow organizations to set reasonable recruitment timelines, allocate responsibilities and track the progress of recruitment more effectively [101]. Project planning and monitoring are crucial in enhancing the coordination, accountability and operational efficiency in organisational processes [102]. Communication management is also deemed as essential in recruiting as the hiring process involves HR team, Hiring Managers, Recruiters, and Candidates [103]. Communication can help avoid misunderstandings, coordination and timely decision-making during recruitment processes [4]. Furthermore, risk management procedures can assist companies in handling uncertainties like candidate withdrawals, scheduling problems, and budget constraints [104]-[110]. Monitoring and Control also enable organizations to track the recruitment performance and ensure the

recruitment goals are met within the planned time and resources [111].

Some experts believe that incorporating project management principles into recruitment will make it more efficient, faster and more effective in achieving recruitment goals [112]. Some researchers however, have argued that the overformalisation and rigidity of project structures can lead to a lack of flexibility in the recruitment process and an inability of companies to react to unforeseen changes in recruitment needs, Traditional HR methods tend to view hiring as a standard administrative process, while project-based recruitment methods view it as a temporary, purposeful process that needs to be coordinated strategically and for which resources must be managed [113]-[118]. Strategic HRM and structured management practices can be combined to enhance organizational short- and long-term talent management outcomes, as explained by [8],[119][120].

2.4 Time Management and Communication in Hiring Processes

It is widely acknowledged that effective time management and communication play an important part in developing a more efficient and successful recruitment process [121][122]. Clearly established time frames, coordinated timing and the flow of communication between HR and hiring managers help to ensure that vacant roles are filled with suitably skilled individuals within acceptable time periods [123][124]. A failure to communicate clearly regarding the scheduling of interviews, gaining of necessary approvals and providing feedback can hinder the process and lead to potentially suitable candidates being rejected or disappearing from the pool [125]-[130]. Feedback to candidates throughout the recruitment process is vital as timely communication can enhance candidate perceptions of the organization and the overall recruitment process [131]-[135]. Poor communication is cited as one of the top 3 contributors to hiring success as a lack of communication results in misunderstandings, delayed decisions, dissatisfaction among candidates and ultimately recruitment failure [136]-[140]. Others believe that while time management can improve operational efficiency, applying undue pressure to speed up recruitment could potentially result in a decline in the standard

of candidates and hiring decisions .

2.5 Impact of Project Management on Organizational Performance

It is evident that project management practices contribute to enhanced organizational performance through enhanced planning, coordination and resource management [141]-[144]. Project management helps in proper resource allocation, operational inefficiencies, and strategic decision making within an organization [145]. Within the HR department, project management concepts such as workforce planning, recruitment coordination, and monitoring employee performance, may lead to organizational effectiveness [146]-[148]. Studies conducted confirm that organizations that employ structured project management techniques experience greater operational performance, improved communication channels, and enhanced achievement of organizational objectives [6] With respect to recruitment, it is expected that project management principles assist in managing hiring duration and decreasing recruitment lag [149], and coordinating between various entities involved [150]. As a result, project management concepts will potentially support strategic workforce objectives by enhancing efficiency and stakeholder management in the recruitment process [151][152].

2.6 Research Gap

A large volume of existing literature on both recruitment efficiency and project management is available, but these topics have tended to be treated as distinct areas of research. Existing studies are typically focused on issues such as challenges faced during recruitment, effectiveness of hiring and human resource practices. Within the project management area research has tended to investigate topics such as planning, organization, coordination and effectiveness in operating organizations. Very little literature seems to be available on recruitment as a project management activity that may be structured, scheduled and managed with appropriate communication and risk management strategies employed throughout. Moreover, there are very few qualitative studies in particular that discuss HR practitioners' views on how project management principles are used in recruitment, and rather, much of the literature is

quantitative in approach, and organization-focused rather than profession-focused. In this study we are therefore attempting to explore through qualitative research methods, the contribution that project management principles can make to increasing efficiency in recruitment.

3- METHODOLOGY

3.1 Research Methodology

In this chapter, the research methodology adopted to explore the possibility of enhancing the hiring efficiency in the process of recruitment by the application of project management principles is explained. Research philosophy, research approach, research design, sampling technique, data collection methods, data analysis procedures, ethical considerations and study limitations are discussed. The chosen method aims to give an in-depth understanding of the recruitment management practices and the experiences of the professionals participating in recruitment activities.

The research method for the study is qualitative and will be used to find out the ways of improving the efficiency of hiring in the recruitment processes by using project management principles. The qualitative approach is deemed appropriate as it is aimed to provide detailed understanding about the experiences, opinions and perspectives of the participants on recruitment practices and project management activities. Qualitative research, in contrast to quantitative research, is more suited to research in which the researcher is interested in exploring practical experiences and organisational processes in greater depth.

The study adopts an interpretivist research philosophy since it is about how HR professionals interpret and experience the recruitment management within their organisations. In interpretivism, the world is socially created and people can have different experiences of organisational practice in various job roles and situations. Thus, this philosophy is suitable as the study is intended to explore professional perceptions, actions and experiences in project management practices in recruitment.

Moreover, an inductive research method is used, meaning the themes and ideas are derived from the collected data rather than testing a preconceived hypothesis. The inductive approach will be appropriate as the study attempts to create

understanding from the participants' responses and practical experiences in recruitment processes. This also helps in promoting flexibility in the identification of patterns and themes that are emerging from the conversation of interviews.

3.2 Research Design and Data Collection

This study employs an exploratory research design due to the lack of research that have explored the recruitment effort specifically as a PM activity. Exploratory research is suitable for topics that are not well-studied and to discover fresh ideas in relation to recruitment management practices. The design also enables the researcher to gain deeper insights and patterns from the participants' experiences in the recruitment planning, communication and hiring efficiency process.

Semi-structured interviews are the major data collection technique used in the study. Semi-structured interviews have flexibility in the discussion and provide the opportunity to provide detailed information about one's experiences at work. An interview question guide is employed to ensure uniformity, but permits participants to add on to it as needed. Open-ended questions are used to allow for a more detailed response from participants on the processes they are going through and the project management practices they are using when recruiting.

The interviews will be held online with people who are professionally engaged in recruitment, hiring and project coordination activities. The questions will be centered on planning a project, communicating effectively, facing recruitment hurdles, managing time and optimizing hiring efficiency. Interviews are appropriate since they offer detailed qualitative information on the application of project management principles in the real working context of organisations in the recruitment process. In addition, semi-structured interviews allow more in-depth and accurate data collection, as it allows for clarification and additional questions, as Kvale (2009) suggest.

In this study, purposive sampling is applied to select the respondents who have relevant knowledge and experience in recruitment and human resource management field. This sampling method enables the researcher to gather information from people who are directly involved in hiring processes and who can be valuable sources of information about the research problem. Total participants in the study are five

including: HR Manager, Recruitment Specialist, Talent Acquisition Officer, Project Manager and HR Executive.

3.3 Data Analysis and Ethical Considerations

Thematic analysis will be used to analyse the collected interview responses. It is a widely adopted approach in qualitative research that is used to detect, structure and explain emerging patterns or themes from a text set (Braun & Clarke, 2006). Once the interviews have been conducted, the responses will be typed and read several times to find common ideas and concepts. The researcher will then design the data and cluster similar answers into larger themes that involve recruitment effectiveness, communication problems, planning procedures, hiring postpone and project management uses in recruitment. Thematic analysis is suitable when the researcher wants to interpret the experiences of participants in a systematic way with flexibility when analysing the qualitative data.

Ethical issues are also significant on this research. Before the participants are interviewed, they will be told the purpose of the research. No one will be compelled to participate and they will be able to leave the study at any time. Confidentiality and anonymity will be respected throughout the research process, and no personal or organisational information will be revealed in the final study. All collected information will be for academic use only. The research will be conducted in accordance with rules of the scientific ethical code for the protection of the participants and handling the data responsibly.

Although the study has provided valuable information, it does have some limitations. The results of the study might not be generalisable to larger populations or to other industries due to the small sample size. The quality of responses gathered in interviews could also be influenced by time constraints, as well as by the potential for bias among participants. However, the study provides valuable qualitative insights into the possibilities of enhancing hiring efficiency in organisations by applying project management principles.

4- DATA ANALYSIS

Five participants who participate in the recruitment and hiring process were intercepted and qualitative data gathered from them and analyzed and interpreted in this chapter. The aim

of the chapter is to explore the impact of project management principles on recruitment hiring efficiency. The qualitative responses were analysed on a thematic basis in order to detect common themes and concepts concerning project planning, communication, time management, recruitment issues and efficiency of hiring.

The responses from the interviews were transcribed and reread to minimize the likelihood of errors and further enhance the reliability of the findings, before they were analyzed. Information that was incomplete or redundant was edited out in appropriate cases and participant identities were anonymised with the codes P1, P2, P3, P4 and P5. The data was then categorized and coding started. The sample consisted of five participants who were selected using purposive sampling, as they have experience with recruitment and project coordination activities.

Participant Number	Participant Type
P1	HR Manager
P2	Recruitment Specialist
P3	Talent Acquisition Officer
P4	Project Manager
P5	HR Executive

Thematic analysis based on the work of Braun and Clarke (2006) was used to analyse the collected data. The analysis was conducted through transcription of the interviews, re-reading of the responses, initial coding, theme creation and the interpretation of the results. Codes were then organized by themes, for example, codes on recruitment planning were combined under the theme of recruitment planning, codes on communication effectiveness were combined under the theme of communication effectiveness, etc. Based on participants' responses, the themes that emerged were grounded, deepening the understanding of recruitment management practices in organisations.

Theme 1: Project Planning Improves Recruitment Efficiency

The majority of the participants indicated that project planning is very important to enhance the efficiency of recruitment and to conduct the recruitment activities more effectively. Participants shared the benefits of structured

planning in defining the stages of the recruitment process, assigning responsibilities, and tracking the progress of the recruitment process. P2 reported that “structured timelines helped minimize hiring delays” and P1 reported that “right scheduling has helped with better coordination between HR and hiring managers”. The participants also reported that there was less confusion and better accountability for team members participating in recruitment activities when there was a clear task allocation.

The results are consistent with project management literature, where it is suggested that planning and scheduling help to increase the efficiency of an organisation and operational control [2]. PMI (2021) also highlights the importance of project planning in facilitating effective coordination, resource allocation and monitoring in organizational activities. But, it was pointed out by some that, when the planning is too much and the procedures are fixed, then sometimes it can lead to less flexibility in recruiting processes when it is an emergency requirement. Project planning facilitates the organisation and efficiency of recruitment, however, organisations need to be flexible enough to meet changing recruitment needs and unforeseen recruitment issues.

Theme 2: Communication and Coordination Challenges

Participants highlighted communication and coordination problems as key factors that impact the efficiency of recruitment and hiring processes. Some participants mentioned that there were often miscommunications between HR and hiring managers regarding interview scheduling, approvals, and feedback to the candidates. P3 reported that “there was slow communication between the departments which resulted in some confusion during recruitment.” Participants also noted the lack of coordination between stakeholders which sometimes led to duplication of efforts, lack of clarity in roles and responsibilities, and inadequate communication with candidates.

Many participants felt that poor communication had a bad effect on candidate experiences, and made recruitment processes more inefficient. Candidates did not get timely feedback and were not updated, which led to candidate dissatisfaction and even candidate withdrawal in some cases.

These results are consistent with [5], who believe that communication is important to recruitment and candidate perceptions of the process. Likewise, [2] imply that communication failures during the recruitment process can decrease the motivation and interest of job seekers and the organisation's attraction. Overall, participants saw that communication management is essential in order to be able to recruit successfully; they also believed that the better coordinated communication is, the more effective the decision-making process is, the less the delays are, and the better candidates' experiences are during the recruitment process.

Theme 3: Importance of Time Management in Recruitment

The need for effective time management during recruitment to gain greater efficiency and achieve successful hiring was a huge focus of the group. The majority of the participants shared the experience that effective management of deadlines, interview scheduling and approval processes decreased recruiting delays and efficiency. P4 reported that “decision making was swift which prevented the loss of qualified candidates in the recruitment process.” It was also observed that the good planning and timely communication of the participants led to the satisfaction of the candidates and enhanced candidate retention during the recruitment process.

The results are consistent with the findings of [3] which indicate that time management is crucial for keeping the recruitment process running and minimizing operational disruptions from empty positions. But others contended that pushing candidates to be recruited too quickly can have a negative impact on the candidate assessment and quality of hires. P5 said that sometimes, recruitment could be rushed and thus inappropriate candidates were recruited. So, while it enhances the speed of hiring, it can also boost the efficiency of an organisation, it is crucial to manage time effectively in hiring while keeping in mind that speed does not come at the expense of the quality of hiring decisions and the success of the employees.

Theme 4: Project Management Principles Support Hiring Success

There was a consensus that the principles of project management have a positive impact on the hiring process and contribute to the process in organisations. The participants described how

project management practices including planning, monitoring, accountability and resource management contributed towards establishing more structured and organised recruitment systems. P1 reported that “project management techniques enhanced the tracking and accountability of the recruitment process.”

The results are consistent with those of Turner (2016) who states that project management practices enhance organisational coordination and operational performance. Meredith, Shafer and Mantel (2017) also note that accountability and efficiency are enhanced in organisations when they are monitored, scheduled and managed. Others, however, pointed out that such a structured approach to projects might limit flexibility in recruitment and hinder decision making processes in emergency hiring. Nevertheless, the majority of participants felt that the use of project management principles in recruitment organisation led to a better recruitment process and better coordination among stakeholders, and that it helped to achieve good recruitment results.

5.- DISCUSSION

The results of this research suggest the use of project management principles can be highly beneficial in the enhancement of the recruitment efficiency and to support successful recruitment outcomes within an organisation. In the answers to the interview questions, it was found that structured planning, management of communication, coordination, and time management has a positive effect on the recruitment process and on the performance of a company's recruitment. All participants emphasized that with the use of project management that includes scheduling, assigning tasks, monitoring, and planning for communication, the recruitment process is more organized and manageable. The results are consistent with the current research findings that project management practices enhance the operational coordination, accountability and organisational efficiency.

A key finding in this study is that the planning of a project is an important factor in increasing the efficiency of the recruitment process. The clear structure of recruitment plans, timelines and task allocation helped to minimize confusion and enhance HR to HCM coordination, participants

said. Businesses also benefitted from structured planning, as it helped them track the recruitment process more closely and finish the tasks within the given time frame. The results of this work corroborate the position of [7] that project planning and monitoring can enhance the efficiency of an organisation and its operational control. Some participants also noted, however, that there could be a loss of flexibility as a result of too much planning and too rigid of a recruitment process, particularly if urgent recruitment decisions must be made. This indicates that there is a need to ensure that there is a balance in the recruitment process between planned recruitment and adapting to new requirements.

Furthermore, issues of communication and coordination arose as key areas of concern regarding the effectiveness of recruitment. Communication between HR teams and hiring managers was cited by several participants as a key source of recruitment delays and added inefficiencies in operations. Recruitment processes were frequently delayed, candidates were not being updated and responsibilities were not always clearly defined, which negatively impacted candidate experience. The findings agree with [3] who showed that communication has a significant impact on recruitment results and perceptions of organisations. In line with this, [6] propose that poor recruitment communication can lead to decreased applicant involvement and attractiveness of the organisation. So, the findings suggest that communication management is a crucial component in the process of recruitment, as timely coordination can lead to better decision making, lesser delays, and ultimately better satisfaction of candidates during the recruitment process.

The study also found that good time management is crucial for sustaining the efficiency of the recruitment process and minimizing the impact of unemployment on the company's functioning. It was revealed that the right management of deadlines, running of interviews, and approval of applications facilitated faster hiring and better performance in their operations. The timely decision making was also regarded as vital in maintaining qualified candidates when recruiting. In keeping with Noe et al. (2020), effective time management is said to help recruit effectively and stabilize the workforce. But others noted that the

rush to finish the recruitment may impact the evaluation of candidates and recruitment quality. This finding shows that whilst time management enhances operational efficiency, organisations will need to ensure that the speed of recruitment does not affect the quality of the recruitment and the long term success of the organisation.

The other key result of the study is that project management concepts enable success in hiring, and helps to create a more efficient structure, accountability and management of resources in recruitment. Agreement was generally expressed that in the process of recruiting, deadlines, stakeholders, objectives and performance monitoring have come into play making recruitment more and more a project-like activity. Project management techniques like monitoring, scheduling and coordinating were seen as positive as it helped to enhance recruitment organisation and accountability in recruitment processes. The results align with the conclusions of Meredith, Shafer and Mantel (2017) which indicated that project management practices increases the coordination and effectiveness of an organisation's operation. While this is good news, others felt that overly structured project structures can limit flexibility and delay critical hiring decisions.

Although this study yielded some valuable information, certain limitations are noted. Only five participants were involved in the study, which means that the results may not be applied to larger populations or other industries. Further, the research was predominantly of a qualitative nature, with results potentially limited to subjective views and experiences of HR and recruitment professionals. Responses provided in the interviews may have also been influenced by the time constraints and by the participants' own biases. However, the study adds valuable qualitative insights about the implementation of project management principles, in recruitment operations.

The study could be extended in the future by including more sample size and industries/organisational settings. Another approach of studying the relation of project management practice with recruitment efficiency can be through quantitative or mixed approach methods relying on statistical data. Additional studies also can explore further the effect of digital recruitment technologies and project management

software upon recruitment process and organizational recruitment strategies. The results conclude that project management application in recruitment processes can increase recruitment efficiency of planning, communication, coordination and recruitment of modern organizations.

6. CONCLUSION

The current research proposal reviewed the relationship between the principles of project management and recruitment efficiency in modern organizations. There is a complexity in recruitment operations, hence the recruitment activities need a systematic method in present day competitive labor market. Through literature review of current research papers related to this topic, it has found that, the recruitment is not just an administrative HR task but it's increasingly becomes a strategic activity that need to be planned, communicated, synchronized, monitored and controlled in terms of availability of the resources. Hence, this research is trying to demonstrate how the principles of project management namely project planning, communication management, time management and project coordination are helps in the hiring efficiency and recruitment processes of an organization.

Based on the literature reviewed, the relationship between recruitment efficiency was found to be frequently linked to such indicators as time-to-hire, cost-per-hire, candidate quality and organisational productivity. The communication gaps, delay in recruitment activities, poor coordination and lack of planning were found to be major challenges influencing the effectiveness of recruitment in the previous study. Previous studies also showed how project management concepts increase organizational coordination and accountability, scheduling and operational efficiency. But there was a corresponding lack of literature, as recruitment and project management have generally been studied independently with little qualitative study focusing on recruitment as a project management activity.

A qualitative approach was chosen, featuring semi-structured interviews with five professionals engaged in recruitment and project coordination work, to fill this void. Thematic analysis enabled the researcher to uncover major themes concerning project planning, communication, time

management and recruitment efficiency. The selected approach was deemed suitable as it allowed for the exploration of the experiences and views of participants with regards to recruitment management practices in organisations in detail. The literature reviewed and the results from interviews indicated that the study can be expected to add value to the process of recruitment, both in terms of efficiency and hiring, through the application of project management principles. Organisations with structured planning, scheduling and monitoring practices are expected to find that they have improved coordination, hiring times reduced, accountability improved and better recruitment practices. The results also suggest that a good or effective HR communication with HRM is likely to enhance the candidate experience on the recruitment process and potentially alleviate the inefficiencies that can happen in the process. In addition, effective time management should lead to quicker hiring decisions and minimize the loss of talented people in the hiring process.

The study also anticipates that recruitment practices will increasingly become more project-like due to objectives, deadlines, stakeholders, allocation of resources and performance monitoring. While there are some indications that over-formalisation can adversely affect recruitment flexibility, the body of evidence suggests that the application of project management principles in a balanced way can enhance recruitment structures and the organisational recruitment outcomes. Hence, this study has both human resource management and project management literature contributions, by offering qualitative knowledge on how project management concepts are applied in the recruitment process. The results could also be of value to organisations that are looking for recommendations on how to be more efficient when hiring, coordinating the workforce, and planning its workforce in today's business climate.

REFERENCES

- [1] Armstrong, M., & Taylor, S. (2023). *Armstrong's handbook of human resource management practice* (16th ed.).
- [2] Bock, L. (2015). *Work rules!: Insights from inside Google that will transform how you live and lead.* Twelve.
- [3] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- [4] Breugh, J. A. (2013). Employee recruitment: Current knowledge and important areas for future research. *Human Resource Management Review*, 23(3), 193–195. <https://doi.org/10.1016/j.hrmr.2013.07.003>
- [5] Breugh, J. A. (2016). *Talent acquisition: A guide to understanding and managing the recruitment process.* SHRM Foundation.
- [6] Briscoe, J. P., Hall, D. T., & DeMuth, R. L. F. (2006). Protean and boundaryless careers: An empirical exploration. *Journal of Vocational Behavior*, 69(1), 30–47. <https://doi.org/10.1016/j.jvb.2005.09.003>
- [7] Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- [8] Chapman, D. S., & Webster, J. (2003). The use of technologies in the recruiting, screening, and selection processes for job candidates. *International Journal of Selection and Assessment*, 11(2–3), 113–120. <https://doi.org/10.1111/1468-2389.00234>
- [9] Crawford, L. (2006). Developing organizational project management capability: Theory and practice. *Project Management Journal*, 37(3), 74–86.
- [10] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.).
- [11] Dessler, G. (2020). *Human resource management* (16th ed.). Pearson.
- [12] Huemann, M., Keegan, A., & Turner, J. R. (2007). Human resource management in the project-oriented company: A review. *International Journal of Project Management*, 25(3), 315–323. <https://doi.org/10.1016/j.ijproman.2006.10.001>
- [13] Kerzner, H. (2025). *Project management: A systems approach to planning, scheduling, and controlling* (latest ed.).
- [14] Kvale, S. (2009). *Doing interviews.*
- [15] Larson, E. W., & Gray, C. F. (2021). *Project management: The managerial process* (8th ed.). McGraw-Hill.
- [16] Meredith, J. R., Shafer, S. M., & Mantel, S. J. (2017). *Project management: A managerial approach* (9th ed.).
- [17] Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2020). *Human resource management: Gaining a competitive advantage* (12th ed.). McGraw-Hill.
- [18] Parry, E., & Tyson, S. (2008). An analysis of the use and success of online recruitment methods in the UK. *Human Resource Management Journal*, 18(3), 257–274. <https://doi.org/10.1111/j.1748-8583.2008.00070.x>
- [19] Phillips, J. M., & Gully, S. M. (2015). *Strategic staffing* (3rd ed.). Pearson.
- [20] Al Hamad, A. Q. (2016, February). Students' perception of implementing a Smart Learning System (SLS) based on Moodle at Fujairah College. In 2016 13th International Conference on Remote Engineering and Virtual Instrumentation (REV) (pp. 315–318). IEEE.
- [21] AlHamad, A. Q., Alomari, K. M., Alshurideh, M., Al Kurdi, B., Salloum, S., & Al-Hamad, A. Q. (2022, November). The adoption of metaverse systems: a hybrid SEM-ML

- method. In 2022 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME) (pp. 1-5). IEEE.
- [22] Al-Qassem, A. H., Tharwat, A., & Marwaha, S. (2024). The impact of digital transformation readiness towards the new normalcy in the education system. *The International Journal of Learner Diversity and Identities (IJLDI)*, 31(1), 601-613. <https://doi.org/11002734>
- [23] Al-Mashaqbeh, I. F., & Al Hamad, A. (2010, May). Student's perception of an online exam within the decision support system course at Al al Bayt University. In 2010 Second International Conference on Computer Research and Development (pp. 131-135). IEEE.
- [24] Alomari, K. M., AlHamad, A. Q., & Salloum, S. (2019). Prediction of the digital game rating systems based on the ESRB. *Opción: Revista de Ciencias Humanas y Sociales*, (19), 1368-1393.
- [25] Som, A. P. M., & Al-Kassem, A. H. (2013). Domestic tourism development in Asir region, Saudi Arabia. *Journal of Tourism and Hospitality*, 2(1).
- [26] Basha, S. E., Alquqa, E. K., Aldabbas, H., & Elamin, A. M. (2025). The mediating role of resilience in the relationship between attitude towards artificial intelligence and workplace well-being. *Journal of Posthumanism*, 5(6), 2326-2339.
- [27] Ateeq, K., Oswal, N., Jawabri, A., Al Masaeid, T., Alquqa, E. K., Basha, S. E., & Alami, R. (2025). The transformative impact of artificial intelligence (AI) on organisational behaviour (OB): a study of employee engagement, performance, and ethical implications. *Journal of Posthumanism*, 5(4), 1245-1256.
- [28] Alzoubi, H. M., Shwede, F., Shamout, M. D., Alquqa, E. K., & Bawaneh, B. (2024, June). The impact of environmental management practices on sustainability performance: Investigating the mediating role of supply chain integration. In *International Scientific Conference Management and Engineering* (pp. 37-44). Cham: Springer Nature Switzerland.
- [29] Al-Kassem, A., & Nassuora, A. B. (2012). The relationship between Internet usage and the marketing of tourism in Jordan. *International Journal of Economics and Management Sciences*, 1(7), 75-79.
- [30] Aguenza, B. B., Al-Kassem, A. H., & Som, A. P. M. (2012). Social media and productivity in the workplace: Challenges and constraints. *Interdisciplinary Journal of Research in Business*, 2(5), 2046-7141.
- [31] El Khatib, M., Mahmood, A., Al Azizi, A., Al Marzooqi, A., Al Abdooli, K., Al Marzooqi, S., ... & Alshurideh, M. (2023). A trial to improve program management in government bodies through focusing on program resource management: Cases from UAE. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1315-1340). Cham: Springer International Publishing.
- [32] Darbandi, M., Al-Khafaji, H. M. R., Hosseini Nasab, S. H., AlHamad, A. Q. M., Ergashevich, B. Z., & Jafari Navimipour, N. (2022). Blockchain systems in embedded internet of things: Systematic literature review, challenges analysis, and future direction suggestions. *Electronics*, 11(23), 4020.
- [33] Abu-Siam, Y., Shwede, F., Alzoubi, H. M., Ahmed, G., & Al-Sulaiti, I. (2026). Empowering Sustainable Business Models: The Synergistic Role of Fourth Industrial Revolution Technologies and Circular Economy Principles in the Chemical Manufacturing Sector.
- [34] El Khatib, M., Ankit, A., Al Ameer, I., Al Zaabi, H., Al Marqab, R., Alzoubi, H. M., & Alshurideh, M. (2023). The role and impact of big data in organizational risk management. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 2139-2153). Cham: Springer International Publishing.
- [35] Shrouf, H., Shwede, F., Alzoubi, H. M., Aburub, F., & Joghee, S. (2026). Integrating Machine Learning Algorithms and Business Intelligence: Enhancing Decision-making in Food and Beverage Manufacturing Sector.
- [36] Al Hosani, A., Al Mheiri, H., & El Khatib, M. (2023). Emotional intelligence as a success factor for project and project manager. *International Journal of Business Analytics and Security (IJBAS)*, 3(1), 42-55. <https://doi.org/10.54489/ijbas.v3i1.202 HBMSU>
- [37] El Khatib, M., Alnaqbi, A., Alnaqbi, A., Alsuwaidi, H., & El Khatib, A. (2023, March). How blockchain and IoT affect project risk management. In 2023 International Conference on Business Analytics for Technology and Security (ICBATS) (pp. 1-7). IEEE.
- [38] Khatib, M. E., Al Shamsi, M. A., Al Buraimi, K., Al Mansouri, F., Alzoubi, H. M., & Alshurideh, M. (2023). Predictive and prescriptive analytics tools: How to add value to knowledge-based economy — Dubai case study. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1807-1829). Cham: Springer International Publishing.
- [39] Alshurideh, M. T., Al Kurdi, B., Alquqa, E. K., Alzoubi, H. M., Hamadneh, S., & Al Hamad, A. (2024). The impact of information sharing and delivery time on customer happiness: An empirical evidence from the UAE retail banking industry. In *Cyber security impact on digitalization and business intelligence: Big cyber security for information management: Opportunities and challenges* (pp. 353-370). Cham: Springer International Publishing.
- [40] El Khatib, M., Alzoubi, H. M., Alshurideh, M., & Alzoubi, A. A. (2023). Project quality management in the United Arab Emirates mining and construction sector: A literature review. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1341-1353). Cham: Springer International Publishing.
- [41] Nuseir, M. T., Alquqa, E. K., Alzoubi, H. M., Alshurideh, M. T., Al Kurdi, B., & AlHamad, A. (2024). The effect of cyber resilience role in the relationship of intelligent information system on the e-supply chain: An empirical evidence from the UAE healthcare industry. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 69-87). Cham: Springer International Publishing.
- [42] El Khatib, M., & Al-Sadi, A. (2023). Digital transformation and sustainability factor: Cases from UAE. *American Journal of Industrial and Business Management*, 13(1), 1-12.
- [43] Ramzan, F., et al. (2022). Innovativeness and

- involvement: An unexpected purchase due to a referral behavior. In 2022 International Conference on Cyber Resilience (ICCR) (pp. 1–12). IEEE. <https://doi.org/10.1109/ICCR56254.2022.9995742>
- [44] El Khatib, M. M. (2005). The role of information and communication technology (ICT) in organizational e-transformation in United Arab Emirates (Doctoral dissertation). University of South Wales, United Kingdom.
- [45] Abu-Siam, Y., Alquqa, E. K., Shwede, F., Alzoubi, H. M., & El Khatib, M. (2026). Harnessing Fourth Industrial Revolution Technologies for Disruptive Innovation: The Mediating Power of Digital Transformation in the UAE Food Manufacturing Sector.
- [46] El Khatib, M. E., Ibrahim, A., Blooshi, S. A., Almansoori, S., & Khatib, A. E. (2022). Digital transformation and disruptive technologies: Effect of 3D printing on managing projects. In 2022 International Conference on Cyber Resilience (ICCR) (pp. 1–13). IEEE. <https://doi.org/10.1109/ICCR56254.2022.9996011>
- [47] Al Hemairy, Mohamed; Alnaqbi, Ali Hilal; Shwede, F. (2026). Blockchain-Enabled Green AI: Securing Data Integrity in Climate Intelligence Systems. In F. Shwede (Ed.), Predicting and Monitoring Climate Risks Through Green AI: Weather Forecasting, Disaster Prediction, and Biodiversity Monitoring (pp. 1–30). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-7554-0.ch001>
- [48] El Khatib, M. E., Harmoodi, S. A., & Angelova, Y. (2024). Virtual reality as a hub for innovation — correlations and interdependencies. In 2024 2nd International Conference on Cyber Resilience (ICCR) (pp. 1–5). IEEE. <https://doi.org/10.1109/ICCR61006.2024.10532815>
- [49] Ali Deifallah, Mohamad; Hassan, Fais; A. Hafez; Mohamed; Shwede, F. (2026). The Hidden Costs of Intelligence: Compute, Carbon, Accuracy Trade- Offs for Sustainable AI. In F. Shwede (Ed.), Predicting and Monitoring Climate Risks Through Green AI: Weather Forecasting, Disaster Prediction, and Biodiversity Monitoring (pp. 51–76). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-7554-0.ch003>
- [50] Alokdeh, S. K., Ahmed, G., Shwede, F., Alzoubi, H. M., & Alshurideh, M. T. (2026). Harnessing Fourth Industrial Revolution Technologies for Sustainability: The Mediating Role of Innovation Adoption in Food Manufacturing Sector.
- [51] El Khatib, M., Al Zeyoudi, A., & Shaqar, S. B. (2020). The influence of integrating ISO and TQM on project risk management. American Journal of Industrial and Business Management, 10(12), 1886–n.p.
- [52] Alokdeh, S. K., El Khatib, M., Shwede, F., Alzoubi, H. M., & Aburub, F. (2026). Revolutionising Business Innovation: The Transformative Role of Blockchain Technology Mediated By Digital Platforms in Banking Sector.
- [53] Shrouf, H., Shwede, F., Alzoubi, H. M., Aburub, F., & Alshurideh, M. T. (2026). Securing Supply Chains: The Role of Cybersecurity and Fourth Industrial Revolution Technologies in Transforming Manufacturing.
- [54] Alshurideh, M. T., Ahmed, G., Shrouf, H., Shwede, F., & Alzoubi, H. M. (2026). Leveraging Artificial Intelligence and Data Analytics for Digital Innovation: Insights from Banking Sector.
- [55] Alzoubi, H. M., Shwede, F., & Salloum, S. (n.d.). Sustainable Leadership for Environmental Risk. Springer.
- [56] Al-Qassem, A. H. (2024). Performance: The mediating role of job satisfaction and pro-environmental behavior. Taylor & Francis Cogent Business & Management, 11(1). <https://doi.org/10.1080/23311975.2024.2328316>
- [57] Alzoubi, H. M., Tan, C. L., Abidi, N., Hanandeh, A., Ammouri, F., Alzghoul, A. M., & Shwede, F. (2025). Transportation Cost Minimization in Supply Chains Using AI. 2025 International Conference on Business Intelligence for Technology Innovation (ICBITI), 1–7.
- [58] El Khatib, M., Shwede, F., Al-Sulaiti, I., Joghee, S., & Alzoubi, H. M. (2026). Revolutionising Healthcare Performance: The Synergistic Role of Data-driven Innovation and Fifth Industrial Revolution Technologies.
- [59] Ogbolu, G., Adelaja, A. A., Ohanagorom, M. I., & Shwede, F. (2025). Examining the inhibiting factors of sustainable entrepreneurship: evidence from emerging economies. World Review of Entrepreneurship, Management and Sustainable Development, 21(6), 1–26. <https://doi.org/10.1504/WREMSD.2025.150508>
- [60] Shneikat, B., Alawadi, R., & Shwede, F. (2025). Personalized Energy Management Systems in Smart Homes. 2025 International Conference on Business Intelligence for Technology Innovation (ICBITI), 1–7.
- [61] Shrouf, H., Shwede, F., Alzoubi, H. M., Aburub, F., & Alquqa, E. K. (2026). Transforming Innovation Ecosystems: The Role of Fifth Industrial Revolution Technologies and Emerging Technological Trends in the Hospitality Sector.
- [62] Shwede, F. (Ed.). (2026a). AI-Driven Sustainability Across Smart Cities, Business, and Industry. IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-2600-1348-9>
- [63] Shwede, F. (2026b). Predicting and Monitoring Climate Risks Through Green AI: Weather Forecasting, Disaster Prediction, and Biodiversity Monitoring (F. Shwede (Ed.)). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3373-7554-0>
- [64] Shrouf, H., Shwede, F., Alzoubi, H. M., Aburub, F., & Alquqa, E. K. (2026). Transforming Innovation Ecosystems: The Role of Fifth Industrial Revolution Technologies and Emerging Technological Trends in the Hospitality Sector.
- [65] Alquqa, E. K. (2026). Revolutionising Business Intelligence in Banking: The Mediating Role of Fifth Industrial Revolution Technology in Artificial Intelligence Integration in the Commercial Sector.
- [66] Shwede, F., Aburub, F., Alzoubi, H. M., El Khatib, M., & Ahmed, G. (2026). Unleashing Big Data's Potential: The Mediating Role of Predictive Analytics in Decision-making for Technology and Innovation Sector.
- [67] El Khatib, M., Al Qurashi, F., & Al Brieki, S. (2021). Challenges of design and implementation of program governance — Cases from government bodies in UAE. American Journal of Industrial and Business Management, 11(5), 566–581.
- [68] Som, A. P. M., & Al-Qassem, A. (2023). The influence of

- social and economic inequalities on support for tourism in developing communities: An intervening effect of tourism resources. *Planning Malaysia*, 21.
- [69] Shwede, F., Ahmad, A. Y. A., Almheiri, S., Mago, B., & Alawadi, R. (2025). AI-Based Building Energy Management in Smart Cities. 2025 International Conference on Business Intelligence for Technology Innovation (ICBITI), 1–7.
- [70] Al-Qassem, A. H., Singh, N., Chopra, A., & Haddad, A. M. (2024). Impact of coronavirus crisis (COVID-19) on the sentiments of travelers in UAE. *The International Journal of Learner Diversity and*
- [71] Shwede, F., Ali, S. M., Alqudah, M. K., & Radwan, E. (2025). Intelligent Street Lighting System for Smart Cities. 2025 International Conference on Business Intelligence for Technology Innovation (ICBITI), 1–7.
- [72] Tan, C. L., Alzoubi, H. M., Yanamandra, R., Barakat, S., & Shwede, F. (2025). Supply Chain Disruption Prediction Using Machine Learning. 2025 International Conference on Business Intelligence for Technology Innovation (ICBITI), 1–8.
- [73] Salloum, S. A., Al Khasoneh, O., Abousamra, R., & AlHamad, A. Q. M. (2025). Generative AI in Advertising and Marketing: A BERT-Based Analysis of Text Descriptions for Product Advertisement. In *Generative AI in Creative Industries* (pp. 269-283). Cham: Springer Nature Switzerland.
- [74] Al-Ahmed, H., Alshaketheep, K., Mansour, A., AlHamad, A., Alshurideh, M., Al Zeer, I., & Deeb, A. (2025). Exploring the Effectiveness of Personalized Marketing Strategies in E-commerce Platforms. In *The Digital Edge: Transforming Business Systems for Strategic Success: Volume 2* (pp. 567-579). Cham: Springer Nature Switzerland.
- [75] Alzoubi, H. M., & Ahmed, G. (2022). Perceived factors affecting students academic performance. *Academy of Strategic Management Journal*, 21(4).
- [76] Al Shurideh, M., Alzoubi, H. M., Al Kurdi, B., Hamadneh, S., Ahmed, G., Al-Sulaiti, K., ... & Ozturk, I. (2025). Consumer and economic influences on electric vehicle adoption: The mediating role of attitudes and the moderating effect of demographics. *International Journal of Energy Economics and Policy*, 15.
- [77] Alzoubi, H. M., Al Shurideh, M., Al-Gharaibeh, S. M., Al-Shyaab, K. O. M., Al Kurdi, B., Al-Sulaiti, I., ... & Alquqa, E. K. (2025). Assessing Economic and Infrastructure Constraints on Electric Vehicle Purchase Decisions: A Demographic-Moderated Analysis in Emerging Markets. *International Journal of Energy Economics and Policy*, 15.
- [78] Salloum, S. A., AlHamad, A. Q. M., Masa'deh, R. E., Elnekiti, A., & Shaalan, K. (2025). Predicting Player Performance in Sports: A Simulation System and Machine Learning Approach. In *Generative AI in Creative Industries* (pp. 413-432). Cham: Springer Nature Switzerland.
- [79] Nuseir, M. T., Ahmad, A. A., Alquqa, E. K., Alzoubi, H. M., Al Kurdi, B., & Alshurideh, M. T. (2024). Impact of supply chain resilience on competitiveness with the mediating role of supply chain capabilities: empirical evidence from the UAE electronics industry. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 129-149). Cham: Springer International Publishing.
- [80] Alshurideh, M. T., Al Kurdi, B., Alquqa, E. K., Alzoubi, H. M., Hamadneh, S., & AlHamad, A. (2024). Investigating the online buying behavior in the UAE online retail industry: The role of emotional intelligence and customer perception. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 371-386). Cham: Springer International Publishing.
- [81] Nuseir, M. T., Alquqa, E. K., Al Shraah, A., Alshurideh, M. T., Al Kurdi, B., & Alzoubi, H. M. (2024). Impact of cyber security strategy and integrated strategy on e-logistics performance: An empirical evidence from the UAE petroleum industry. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 89-108). Cham: Springer International Publishing.
- [82] Alquqa, E. K., Kurdi, B. A., Alzoubi, H. M., Alshurideh, M. T., Hamadneh, S., & Hamad, A. A. (2024). Digital sustainability and strategic supply chain for achieving a competitive advantage: An empirical evidence from telecommunication industry in the UAE. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 183-203). Cham: Springer International Publishing.
- [83] Khatib, M. E., Ibrahim, A., Blooshi, S. A., Almansoori, S., & Khatib, A. E. (2022). Digital transformation and disruptive technologies: Effect of 3D printing on managing projects. In *2022 International Conference on Cyber Resilience (ICCR)* (pp. 1–13). IEEE.
- [84] Al Shraah, A., Al Kurdi, B., Alquqa, E. K., Alshurideh, M. T., Alzoubi, H. M., & Hamadneh, S. (2024). Does product differentiation strategy mediate the relationship between cost leadership strategy and order-winners? An empirical evidence from UAE retail industry. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 509-526). Cham: Springer International Publishing.
- [85] Alquqa, E. K., & Faris, B. (2025, November). Enhancing Distance Learning through AI-Powered Voice-Based Virtual Office Hours: A Case Study in an Innovation, Entrepreneurship, and Sustainability Course. In *Asia Education Technology Symposium* (pp. 147-159). Singapore: Springer Nature Singapore.
- [86] Alzoubi, H. M., Shwede, F., Shamout, M. D., Alquqa, E. K., & Bawaneh, B. (2024, June). Process Control Influence on Mitigating Supply Chain Risk: Exploring the Mediating Effect of Information Security—Evidence from the UAE Construction Industry. In *International Scientific Conference Management and Engineering* (pp. 259-267). Cham: Springer Nature Switzerland.
- [87] Al-Qassem, A. H., Tharwat, A., & Sahaweneh, N. (2025). Work addiction as an effective factor for employee's performance in the banking industry in Egypt. *Journal of International Business Policy*. Advance online publication.

- <https://doi.org/10.1177/23197145251333102>
- [88] Mohammad, B. H., Hani, A. A., & Hussein, A. O. (2016). Mechanisms in utilizing electronic management at Al Ain University of Science and Technology. *American International Journal of Contemporary Research*, 6(5).
- [89] Alqudah, A., Momani, H. R., Alshawabkeh, R. O., Al-Abbadi, L., Al-Kassem, A. H., & Qawqzeh, H. (2025). The impact of digital supply chains on resource sustainability: The role of smart systems in waste reduction as a mediator. *EDPACS*. Advance online publication. <https://doi.org/10.1080/07366981.2025.2596451>
- [90] El Khatib, M., El Baradie, M., & Alrashedi, M. B. (2024). AI capable emotional robot teacher as a new economical trend in education. In *2024 2nd International Conference on Cyber Resilience (ICCR)* (pp. 1–5). IEEE. <https://doi.org/10.1109/ICCR61006.2024.10533009>
- [91] Alokdeh, S. K., Shwede, F., Alzoubi, H. M., Ahmed, G., & Al-Sulaiti, I. (2026). Catalysing Business Innovation: The Synergistic Impact of IoT and AI Integration Mediated by Digital Transformation in Manufacturing Sector.
- [92] Al-Kassem, A. H., & Marwaha, S. (2022). Employee satisfaction and its impact on faculty members' performance at Al Ain University of Science and Technology in the UAE. *NeuroQuantology*, 20(2), 272-287.
- [93] Khatib, M. M. E., & Ahmed, G. (2024). Achieving excellence in business practices through artificial intelligence: A case study of the Dubai public sector. *International Journal of Public Sector Performance Management*, 14(2), 262–277.
- [94] Al-Qassem, A., Agha, K., Mendoza, S., & El-Farra, E. (2022). Emergency management and its implications for the hospitality industry during the Coronavirus Disease 2019 (COVID-19) outbreak. *Journal of Positive School Psychology*, 6(2), 1824-1839.
- [95] El Khatib, M. E., Al-Nakeeb, A., Binkhadim, S., & Shehata, O. (2024). Modern digitization, technical integration, and social sustainability: together toward better quality of life. In *2024 2nd International Conference on Cyber Resilience (ICCR)* (pp. 1–5). IEEE. <https://doi.org/10.1109/ICCR61006.2024.10532784>
- [96] AlHamad, A. Q. M., & AlHammadi, R. A. (2018, March). Students' perception of E-library system at Fujairah University. In *International Conference on Remote Engineering and Virtual Instrumentation* (pp. 659-670). Cham: Springer International Publishing.
- [97] Elsherif, H. M., Alomari, K. M., AlHamad, A. Q. M., & Shaalan, K. (2019). Arabic Rule-based Named Entity Recognition System Using GATE. In *MLDM* (1) (pp. 1-15).
- [98] El Khatib, M. E., Angelova, Y., & Kazim, H. (2024). Digital transformation significance on quality of SMART services: Innovation, mobility, adaptability, analytical ability and trust. In *2024 2nd International Conference on Cyber Resilience (ICCR)* (pp. 1–4). IEEE. <https://doi.org/10.1109/ICCR61006.2024.10533077>
- [99] El Khatib, M. (2024). Digital transformation and digital disruption technologies: The effect of AI and machine learning on managing projects. In H. M. Alzoubi, M. T. Alshurideh, & S. Vasudevan (Eds.), *Technology Innovation for Business Intelligence and Analytics (TIBIA)* (Studies in Big Data, Vol. 147). Springer. https://doi.org/10.1007/978-3-031-55221-2_4
- [100] Abu-Siam, Y., Shwede, F., Alzoubi, H. M., Al-Sulaiti, I., & Ahmed, G. (2026). Revolutionising User-centric Innovation: AI-driven Personalisation as a Catalyst for Sustainable Growth in Banking Sector During the Fifth Industrial Revolution.
- [101] Aburub, F., Abu-Siam, Y., Alshurideh, M. T., Shwede, F., & Alzoubi, H. M. (2026). Enhancing Business Agility in the Manufacturing Sector: The Role of Fourth Industrial Revolution Technologies and Organisational Change.
- [102] Alzoubi, H., Alshurideh, M., El Khatib, M., Shamout, M. D., Yanamandra, R., Nair, K., & Al-Gharaibeh, S. M. (2024). Navigating the interplay between innovation orientation, dynamic capabilities, and digital supply chain optimization: Empirical insights from SMEs. *Uncertain Supply Chain Management*, 12(2), 649–658.
- [103] Basha, S. E., Gull, M., Alquqa, E. K., Mahmoud, K., & Harhash, A. (2025). The role of AI in university students' mental health: a bibliometric review. *Discover Social Science and Health*, 5(1), 131.
- [104] Al Kurdi, B., Alquqa, E. K., Al-gharaibeh, S. M., Alhyasat, K. M. K., Alzoubi, H. M., Al Shurideh, M., ... & Al-Sulaiti, G. (2025). Determinants influencing consumer adoption of energy-efficient home appliances in Jordan: An empirical analysis. *International Journal of Energy Economics and Policy*, 15(4), 780-788.
- [105] Al-Nakeeb, A., El Khatib, M., Zitar, R. A., Alhosani, A., & Alhosani, I. (2023). Project manager's role in managing project knowledge process: An approach to enhance project quality. *International Journal of Computers and Their Applications*, 30(4), n.p. n.p. ResearchGate+1
- [106] Al Kurdi, B., Alquqa, E. K., Nuseir, M. T., Alzoubi, H. M., Alshurideh, M. T., & AlHamad, A. (2024). Impact of cyber security and risk management on green operations: Empirical evidence from security companies in the UAE. In *Cyber security impact on digitalization and business intelligence: Big cyber security for information management: Opportunities and challenges* (pp. 151-167). Cham: Springer International Publishing.
- [107] Hamadneh, S., Alzoubi, H. M., Alquqa, E. K., Al Shraah, A., Alshurideh, M. T., & Al Kurdi, B. (2024). The Mediating Role of Information Sharing in the Effect of Blockchain Strategy Information Security on E-Supply Chain in the UAE Real Estate Industry. In *Cyber Security Impact on Digitalization and Business Intelligence: Big Cyber Security for Information Management: Opportunities and Challenges* (pp. 387-407). Cham: Springer International Publishing.
- [108] El Khatib, M., Zitar, R. A., Alnaqbi, K. A., Alnaqbi, W., Alharmoodi, S., & Baydoun, A. (2023). Effect of big data and analytics on managing projects. *International Journal of Computers and Their Applications*, 30(2), 173–181. ResearchGate+1
- [109] Al Zarooni, L., & El Khatib, M. (2023). Robotics process automation (RPA) and project risk management. *International Journal of Business Analytics and Security (IJBAS)*, 3(1), 75–91. HBMSU
- [110] Alquqa, E. K., Basha, S. E., Yehya, S., & Yousef, M. (2026).

- The Intervening Role of Volunteer Work Between Community Responsibility and Sustainability. In *Strategic Decision-Making in Dynamic Business Environments: Systems and Control Perspectives* (pp. 787-798). Cham: Springer Nature Switzerland.
- [111] Shehab, E., Som, A. P. M., & Al-Qassem, A. (2023). Destination image and tourist retention in Jerusalem. *Planning Malaysia*, 21.
- [112] El Khatib, M., Al Falasi, F., Al Anani, H., & Shurrab, W. (2023, March). The effect of virtual reality and augmented reality on managing projects. In *2023 International Conference on Business Analytics for Technology and Security (ICBATS)* (pp. 1-10). IEEE. Semantic Scholar
- [113] Som, A. P. M., Shariffuddin, N. S. M., Zain, W. M. A. W. M., & Al-Qassem, A. (2023). The influence of socio-cultural and economic impact on tourism support: A mediating role of community value. *Planning Malaysia*, 21.
- [114] Ma'asor, M. A., Som, A. P. M., Yusof, Y., & Al-Qassem, A. (2023). Level of Islamic attributes practices by Muslim-friendly hotels in Malaysia. *Planning Malaysia*, 21.
- [115] El Khatib, M., Ahmed, G., Alshurideh, M., & Al-Nakeeb, A. (2023). Interdependencies and integration of smart buildings and smart cities: A case of Dubai. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1637-1656). Cham: Springer International Publishing.
- [116] Al Qassem, A. H. (2026). Artificial intelligence adoption in accounting information systems: Drivers, strategic implications, and organizational agility. *Scientific Culture*, 12(4), 4091-4099. <https://doi.org/10.5281/zenodo.12426462>
- [117] Alokdeh, S. K., Al-Sulaiti, I., Shwede, F., Alzoubi, H. M., & Ahmed, G. (2026). Transforming Smart Manufacturing: The Pivotal Role of IOT and Data Integration in Enhancing Operational Efficiency in Manufacturing Sector.
- [118] Alquqa, E. K., Alshurideh, M. T., Alalami, J. H., Sharma, R., Joseph, R., & Alzoubi, H. M. (2024, February). The Role of AI in Enhancing Financial Forecasting Accuracy: Transforming Modern Accounting Practices. In *2024 2nd International Conference on Cyber Resilience (ICCR)* (pp. 1-6). IEEE.
- [119] Al-Qassem, A. H. (2024). The mediating role of tourist satisfaction in the relationship between destination authenticity and destination loyalty: The case of Machu Picchu. *The International Journal of Learner Diversity and Identities (IJLDI)*, 31(1), 601-613. <https://doi.org/11002734>
- [120] Alshurideh, M. T., Al Kurdi, B., Yasin, S., Damra, Y., Algasaymeh, A., Alzoubi, H. M., ... & Alquqa, E. K. (2024). Exploring the impact of metaverse adoption on supply chain effectiveness: a pathway to competitive advantage. *Uncertain Supply Chain Management*, 12(2), 883-892.
- [121] Al Qassem, A. H. (2026). Long-term disparities in hybrid workplaces mediated by technology: Impacts on employee visibility, advancement, and performance. *Scientific Culture*, 12(4). <https://sci-cult.net/index.php/cult/article/view/5052>
- [122] Alqudah, A., Momani, H. R., Alshawabkeh, R. O., Al-Abbadi, L., Al-Kassem, A. H., & Qawqzeh, H. (2025). The impact of cyber-physical systems on logistics sustainability: The role of smart energy monitoring as a mediator in improving energy efficiency. *EDPACS. Advance online publication*. <https://doi.org/10.1080/07366981.2025.2596450>
- [123] Al-Qassem, A. H. (2024). Performance: The mediating role of job satisfaction and pro-environmental behavior. *Taylor & Francis Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2328316>
- [124] Martinez, E. B., Al-Kassem, A. H., & Aguenza, B. B. (2022). Operationalization of Negosyo Center as an entrepreneurial strategy to selected micro, small, and medium enterprises in Taguig City. *Global Business & Management Research*, 14.
- [125] Al-Qassem, A. H. (2022). Efficiency and effectiveness of human resource development in the tourism industry of the United Arab Emirates. *Journal of Positive School Psychology*, 6(2), 1811-1823.
- [126] Al-Kassem, A. H. (2022). Accreditation of academic programs: Implications on quality governance and administration of Taguig City University. *Journal of Positive School Psychology*, 6(4), 3908-3923.
- [127] Al-Qasem, A. (2021). Impact of pandemic Coronavirus Disease (COVID-19) on United Arab Emirates tourism industry. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(7), 2556-2570.
- [128] Al-Qassem, A., & Al-Shamaila, M. (2021). Sustainable tourism development: Case study of Aqaba, Jordan. *The International Journal of Hospitality and Tourism Research*, 15(2), 51-76.
- [129] Almazroi, A. A., Abualigah, L., Alqarni, M. A., Houssein, E. H., AlHamad, A. Q. M., & Elaziz, M. A. (2022). Class diagram generation from text requirements: An application of natural language processing. In *Deep Learning Approaches for Spoken and Natural Language Processing* (pp. 55-79). Cham: Springer International Publishing.
- [130] Al-Hamad, M., Alhyasat, K. M., Allozi, A., & AlHamad, A. Q. M. (2024). Medium of instruction matters: Reflecting voices from EFL teachers in online/tradition instruction and the impacts on their job satisfaction, Self-esteem, and professional well-being. *Computer-Assisted Language Learning Electronic Journal*, 25(4), 414-438.
- [131] Al-Kassem, A. H. (2021). Significance of human resources training and development on organizational achievement. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(7), 693-707.
- [132] Alhamad, H., Al-hamad, N. Q. M., AlHamad, A. Q. M., & Alshurideh, M. T. (2023). Pharmacy education and conducting OSCE exam during COVID-19: An overview. The effect of information technology on business and marketing intelligence systems, 569-577.
- [133] Kukunuru, S., Pillai, M. R., & Kassem, A. A. (2019). Creating happiness at workplace: Work team contributions and concerns. *Journal of Computational and Theoretical Nanoscience*, 16(12), 5313-5326.
- [134] Al-Hamad, M., AlHamad, A., & Al-Qawasm, K. (2021). Factors affecting the adoption of Google Translation in higher education through an extended technology acceptance model (TAM): Jordan as a case study. *ICIC*

- Express Letters, 15(11), 1177–1186. <https://doi.org/10.24507/icicel.15.11.1177>
- [135] Qasim AlHamad, A., Salameh, M., & Al Makhareez, L. (2014). Identifying students' trends toward personalizing Learning Management System (LMS) at Zarqa University (Extended). *Journal of Information Technology & Economic Development*, 5(1).
- [136] AlHamad, A. Q., Akour, M. A., & Al-Omari, F. (2012, November). Personalizing student's profiles using JESS in A Learning Management System (LMS). In *Proceedings of 2012 International Conference on Interactive Mobile and Computer Aided Learning (IMCL)* (pp. 109-112). IEEE.
- [137] AlHamad, A. Q., & Al Qawasmi, K. I. (2014). Building an ethical framework for e-learning management system at a university level. *Journal of Engineering and Economic Development*, 1(1), 11.
- [138] AlHamad, A. Q. M. (2020). Predicting the intention to use Mobile learning: A hybrid SEM-machine learning approach. *International Journal of Engineering Research & Technology*, 9(3), 275-282.
- [139] Alquqa, E. K., Aldhanhani, S. K. A. A., Alzaabi, S. K. S., Issa, H. A., Hussein, S., & Ali, A. (2025, April). Predictive Analysis of Fines and Penalties in Environmental Law. In *2025 International Conference on Business Intelligence for Technology Innovation (ICBITI)* (pp. 1-6). IEEE.
- [140] Alquqa, E. K., Bawaneh, B., Alalami, J. H., Alzboun, N., Azeez, A., Alhamadi, I. M., ... & Bataineh, A. (2025, April). AI for Predicting Customer Lifetime Value. In *2025 International Conference on Business Intelligence for Technology Innovation (ICBITI)* (pp. 1-7). IEEE.
- [141] Otair, M. A., & Hamad, A. Q. A. (2005). Expert personalized e-learning recommender system. Retrieved June, 13, 2010.
- [142] AlHamad, A. Q., Al Omari, F., & AlHamad, A. Q. (2014). Recommendation for managing patients' privacy in an integrated health information network. *Journal of Information Technology and Economic Development*, 5(1), 47.
- [143] Alhamad, A., Al-Omari, F. A., & Yaacob, N. (2012). Applying JESS rules to personalize Learning Management System (LMS) using online quizzes. In *2012 15th International Conference on Interactive Collaborative Learning (ICL)*. IEEE. <https://doi.org/10.1109/ICL.2012.6402213>
- [144] Al-Hamad, A., Yaacob, N., & Al-Zoubi, A. Y. (2008). Integrating 'learning style' information into personalized e-learning system. *IEEE Multidisciplinary Engineering Education Magazine*, 3(1), 2-6.
- [145] Elshamy, A. M., Abdelghany, M. A., Alhamad, A. Q., Hamed, H. F., Kelash, H. M., & Hussein, A. I. (2017, September). Secure implementation for video streams based on fully and permutation encryption techniques. In *2017 International Conference on Computer and Applications (ICCA)* (pp. 50-55). IEEE.
- [146] Project Management Institute. (2021). *A guide to the project management body of knowledge (PMBOK® Guide)* (7th ed.). Project Management Institute.
- [147] Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Pearson Education.
- [148] Schwalbe, K. (2022). *Information technology project management* (10th ed.). Cengage Learning.
- [149] Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216–231. <https://doi.org/10.1016/j.hrmr.2015.01.002>
- [150] Turner, J. R. (2016). *Gower handbook of project management* (5th ed.). Routledge.
- [151] Ulrich, D. (2012). *HR from the outside in: Six competencies for the future of human resources*. McGraw-Hill.
- [152] Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: Putting human back into strategic human resource management. *Human Resource Management Journal*, 21(2), 93–104. <https://doi.org/10.1111/j.1748-8583.2010.00165.x>