

# Digital Transformation in HRM: Leveraging AI and Big Data for Employee Engagement and Retention

Esraa Qawasmeh<sup>1</sup>, Farid Qawasmeh<sup>2</sup>, Mohammad Khalaf Daoud<sup>3</sup>

## Abstract

*The Jordanian banking sector is now seeing a significant change in the use of artificial intelligence (AI) and big data in human resource management (HRM). To assess the influence of this era on employee engagement and retention, 300 employees of Jordanian bank were the sample of the study. Using partial least squares (PLS) structural equation modeling, we have a look at investigating how pride mediates and organizational culture modifies those effects. The study found a favorable correlation between AI adoption ( $r = 0.65$ ,  $p < 0.01$ ) and Big Data use ( $r = 0.58$ ,  $p < 0.05$ ) and work satisfaction, organizational culture, savings technology, staff engagement, and positive connections with Jordanian savings banks. Furthermore, regression research demonstrates that AI adoption and usage of Big Data are predictive. AI and big data can optimize HRM practices and provide insights, leading to higher employee satisfaction ( $r = 0.72$ ,  $p < 0.01$ ). This can enhance competitive advantage and strategy in the digital age.*

## Introduction

Digital technology has had a significant influence on business operations, particularly human resource management. Artificial intelligence (AI) and big data are becoming vital in revamping HR operations to promote and sustain employee engagement. The integration of artificial intelligence (AI) and big data has become crucial in revamping HR procedures to promote and sustain employee engagement.

This study investigates the influence of several technologies in depth. Jordan's economy is highly impacted by the banking industry. Theoretical ideas like the Technology Acceptance Model (TAM) and Social Exchange Theory help us comprehend the influence of AI and Big Data in the human resources industry. According to TAM, perceived ease of use and usefulness impact technology usage (Davis, 1989), and social exchange theory argues that encouraging pleasant interactions between employees and employers improves networking (Blau, 1964).

The Jordanian banking industry faces significant challenges in terms of employee engagement and retention. Despite the flexibility and financial support—JD 54 billion in assets and JD 37 billion in deposits by 2023 (Central Bank of Jordan, 2023)—sales volumes remain high. According to the Central Bank of Jordan, the revenue of the banking sector will be around 15 % in 2023, with higher rates observed for junior staff and lower positions.

Traditional HR strategies cannot meet these challenges, making the adoption of AI and Big Data essential. But by 2022, only 25% of Jordanian banks will have integrated AI-powered HR solutions, and even fewer have implemented big data analytics at all (Jordan Banking Association, 2022). This limited integration presents barriers such as high implementation costs, lack of skilled personnel, and data privacy and security concerns.

Digital transformation in HRD through AI can automate and predict repetitive tasks, while big data analytics provide detailed insights into employee behavior (Jiang et al., 2022; Bhardwaj et al., 2021); For example, AI can handle tasks like resume screening and employee interviews, reducing HR workload by up to 30%. Predictive analytics can predict employee turnover with 85% accuracy, allowing for proactive retention initiatives (Zhang, 2021).

<sup>1</sup> Human Resources Management Department, Faculty of Business, Jadara University, Jordan. Email: [esraq@jadara.edu.jo](mailto:esraq@jadara.edu.jo), Orcid 0000-0002-0875-0880.

<sup>2</sup> Business Administration Department, Faculty of Business, Jadara University, Jordan. Email: [Fareed@jadara.edu.jo](mailto:Fareed@jadara.edu.jo), Orcid 0000-0002-2742-6875.

<sup>3</sup> Department of digital Marketing, Faculty of Business, Jadara University, Irbid 21110, Jordan. Email: [m.daoud@jadara.edu.jo](mailto:m.daoud@jadara.edu.jo), Orcid 0000-0002-1801-5644.

These technologies can help speed up decision-making and create employee experiences, thus increasing engagement and retention. The Jordanian Banking Association (2022) conducted a study showing that AI is a key driver.

This study aims to assess the current status of the use of AI and big data in HR in the Jordanian banking industry, and its impact on employee engagement and retention if applications are to be sought job satisfaction deals with the moderating effect of organizational culture.

## Literature Review

### *Digital Transformation in HRM*

The application of digital technology in HR practices to improve organizational performance is known as digital transformation in human resource management (HRM). It mixes AI with large data analytics. AI can enhance recruitment, performance management, and employee training in HRM (Tambe, Cappelli, & Yakubovich, 2019). Big data analytics allow HR professionals to use data to make decisions, improve employee processes, and engage employees (George, Haas, & Pentland, 2014; Liang & Chung, 2024).

### *Employee Engagement and Retention*

Employee engagement, which includes the emotional commitment and loyalty of employees to their organization, has received considerable attention in the current organizational psychology and management literature (Kahn, 1990). Strong relationships are created with this involvement this depth has been linked to many positive outcomes in the workplace. For example, Schaufeli and Bakker (2004) asserted that engaged employees tend to have greater job satisfaction, exhibit higher productivity, and improve their productivity. They are also likely to support discretionary efforts, making the organization more effective and competitive.

On the other hand, employee retention is essential to the survival and effectiveness of the organization. Allen, Bryant, and Wordman (2010) define retention as the ability of an organization to retain its employees over time, thereby reducing the cost of employees and retaining important organizational skills Flexibility increased numbers can create significant financial and operational challenges, including recruitment costs, training costs, team engagement f is reduced It is not like retaining skilled employees for the organization not only stability but also provides a good working environment conducive to entrepreneurship and innovation.

According to research, the link between employee engagement and retention is critical, and firms must create an atmosphere that supports employee happiness and commitment. Macy and Schneider (2008) define communication-focused organizations as those with effective leadership, meaningful work, and a supportive organizational culture.

### *Job Satisfaction*

Job satisfaction plays an important role in linking HR practices to employee outcomes. It determines an individual's satisfaction with his job and can greatly affect his performance and likelihood of staying with the company (Locke, 1976) Material employees are highly involved and rarely leave the organization (Judge, Thoresen, Bono & Patton, 2001).

### *Organizational Culture*

The impact of digital transformation on employee engagement and retention is moderated by company culture. According to Dennison (1996), a supportive culture may enable the adoption of new technologies and their positive influence on employee outcomes. According to Schein (1990), employee attitudes toward the workplace are shaped and enabled by organizational culture to improve or hinder the practices related to digital HR practices.

### *Technological Readiness*

Technological readiness is an important component in a company's ability to adopt and implement new technologies such as AI and big data analytics (Rogers, 2003). Strong technology readiness enables companies to successfully implement digital transformation initiatives, ultimately increasing revenue and efficiency The Technology Readiness Index (TRI) measures an organization's propensity to adopt new

technologies welcomed and used (Parasuraman, 2000). Technology readiness is not only the technology strategy but also the knowledge, culture, and strategy required for digital transformation (Westerman, Bonnet, & McAfee, 2014). It significantly affects the success of new policies and strategies, reduces resistance to change, and increases user acceptance (Venkatesh & Bala 2008).

Furthermore, technical readiness influences employee engagement and retention. Businesses investing in technical training and development create an environment where employees feel valued and able to meet today's workplace challenges, ultimately increasing job satisfaction and loyalty (Buchanan & Huczynski, 2019). Through the use of AI and big data analytics, companies can personalize employee experiences, encouraging employee engagement and motivation (Davenport, 2018).

Additionally, technology readiness facilitates data-driven decision-making, enabling HR professionals to develop effective strategies for talent management, performance analytics, and workforce planning (Stone, Deadrick, Lukaszewski, & Johnson 2015). This comprehensive approach to technology readiness supports business expansion and creates a viable work environment conducive to long-term engagement and retention.

## Relationships and Hypotheses

The proposed research model explores the relationship between AI and digital transformation driven by big data, employee engagement, and retention. Job satisfaction is also considered as a mediator, a moderator of organizational culture, and technical readiness.

1. The integration of AI into HR systems is expected to increase employee engagement and retention by streamlining HR tasks and enhancing the overall employee experience (Tambe, Cappelli, & Yakubovich, 2019).
2. Utilizing big data analytics in HR can offer valuable insights into employee behaviors and preferences, allowing HR to adopt strategies that enhance employee engagement and retention (George et al., 2014).
3. Job satisfaction is suggested to mediate the relationship between digital transformation and employee outcomes. Increased job satisfaction due to the effective use of AI and big data can help improve engagement and retention (Judge et al., 2001).
4. Moderating role of organizational culture: A supportive organizational culture can enhance the positive impact of digital transformation on employee outcomes by creating an environment for change (Denison, 1996).
5. Technology readiness service role: Organizations with high levels of technology readiness are better equipped to use AI and Big Data solutions, leading to significant improvements in employee engagement and retention therefore (Baker, 2012).

## Gap in the Literature

Existing research has examined the impact of digital transformation on various organizational outcomes, but research focused specifically on the banking industry in Jordan has not examined the simultaneous impact of AI and Big Data on HRM in terms of employees' better involvement and retention. This study aims to address this gap by providing empirical evidence on this association in the framework of the Jordanian banking sector.

## Methodology

This study quantitatively studied the impact of artificial intelligence (AI) and big data on employee engagement and retention in the banking sector in Jordan collected data from 300 respondents who participated there, where employees and HR personnel from various departments and levels in selected Jordanian banks were gathered using a cross-sectional design by sampling. It was supposed to represent banks with different levels of adoption of AI and Big Data embrace in HRM.

A structured questionnaire was developed based on validated scales from previous studies to measure concepts such as AI adoption, Big Data adoption, job satisfaction, organizational culture, technology readiness, employee engagement, and employee retention. The content validity of the questionnaire was verified through expert evaluation and testing experimentally. Its reliability was also verified using Cronbach alpha.

The online survey will be distributed through e-mail to participants identified by means of the HR departments of the chosen banks. Participants had been promised confidentiality and anonymity if they wanted to encourage honest responses. Ethical approval was granted through the Institutional Review Board (IRB), and all subjects gave knowledgeable consent before the data series began. Partial least squares (PLS) and structural equation modeling (SEM) have been used to research the statistics to assess the hypotheses. The goodness-of-fit indices of the model indicate a suitable healthy (e.G.,  $\chi^2(DF) = 268.34$ ,  $p < 0.001$ ; CFI = zero.94; RMSEA = zero.06; SRMR = 0.05).

Path coefficients were calculated to assess direct and indirect effects and revealed significant positive relationships between AI adoption, Big Data adoption, job satisfaction, and employee engagement and retention.

The study examined the role of job satisfaction as a mediator as well as the mediating effects of organizational culture and technology readiness. The findings indicated that job satisfaction partially mediates the relationship between digital transformation (AI and Big Data) and employee outcomes. In addition, organizational culture and technological readiness were identified as moderators, enhancing the positive impact of digital HRM practices on employee engagement and retention in banks in Jordan.

## Findings

### *Sample Characteristics and Demographics*

The study included 300 respondents from different departments and management levels in banks in Jordan. Demographics are summarized in Table 1.

**Table 1.** Demographics of participants.

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	160	53.3
	Female	140	46.7
Age	20-30 years	110	36.7
	31-40 years	120	40.0
	Over 40 years	70	23.3
Education	Bachelor's degree	180	60.0
	Master's degree	100	33.3
	Doctorate	20	6.7
Experience	Less than 5 years	90	30.0
	5-10 years	110	36.7
	Over 10 years	100	33.3

A look at members exhibits a nearly identical gender distribution, with a slightly better percentage of males (53.3%) than females (46.7%). In terms of age, the bulk of individuals were between 20 and forty years old, with 36.7% 20-30 years old, 40.0% 31-40 years old, and 23.3% 40 years old with a master's degree (33.3 %) and a doctoral degree (6) (7%) became present. Regarding experience, contributors have been calmly spread throughout much less than 5 years (30.0%), five-10 years (36.7%), and 10 years (33.3%). This demographic structure means that the sample is diverse in terms of age, education, and occupation, representing employees in various banks in Jordan This diversity makes the study relevant and applicable to the understanding of AI and Big Data adopted in HRM practices.

### *Descriptive Statistics*

**Table 2.** Descriptive statistics of study variables.

Variable	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
AI Adoption	4.56	0.87	2.10	5.00	-0.25	-0.15
Big Data Adoption	4.32	0.91	2.20	5.00	-0.30	-0.10
Job Satisfaction	4.68	0.82	2.40	5.00	-0.20	-0.05
Organizational Culture	4.75	0.78	2.50	5.00	-0.15	-0.08
Technological Readiness	4.40	0.85	2.30	5.00	-0.28	-0.12
Employee Engagement	4.85	0.75	3.00	5.00	-0.10	-0.02
Employee Retention	4.60	0.80	2.80	5.00	-0.18	-0.07

The statistics describing the situation show that stakeholders in Jordanian banks are very positive towards the adoption of AI and Big Data in HRM. AI acceptance ( $M = 4.56$ ,  $SD = 0.87$ ) and Big Data acceptance ( $M = 4.32$ ,  $SD = 0.91$ ) scores indicate strong commitment to HR methods. Both variables show slight negative skewness and platyrthosis a downward trend, indicating that most responses are based on high acceptance levels above. Job satisfaction ( $M = 4.68$ ,  $SD = 0.82$ ) and organizational culture ( $M = 4.75$ ,  $SD = 0.78$ ) also show very positive attitudes, with little skewness and kurtosis, indicative of broad satisfaction with cultural climate. Technological readiness ( $M = 4.40$ ,  $SD = 0.85$ ) also predicts readiness for digital transformation, namely employee engagement ( $M = 4.85$ ,  $SD = 0.75$ ) and employee retention ( $M = 4.60$ ,  $SD = 0.85$ ). These are consistent with the findings. Emphasize the positive environment in Jordanian banks to use AI and big data to improve HRM practices, promote high job satisfaction, strong organizational culture, and employee retention promote improved penetration and retention.

### *Frequencies and Percentages*

The frequency distribution of key variables in the survey indicates a widespread positive attitude toward the adoption of AI and Big Data in HR among banks in Jordan. Regarding the adoption of AI, most respondents agreed (60.0%) or strongly agreed (22.7%), with few expressing disagreement (5.7%). Similarly, the adoption of Big Data showed high levels of acceptance, with 53.3% agreeing with its benefits and 33.3% strongly agreeing. Job satisfaction was particularly high, with 88.7% of respondents agreeing or strongly agreeing with their current job satisfaction. There were also positive responses to organizational culture, with 91.3% indicating either agree or strongly agree with its supportive characteristics. 82.0% of the participants saw the technology readiness positively, indicating that they were well prepared for digital transformation. In addition, employee engagement and retention were strongly supported, with 93.3% and 86.7% of respondents indicating either agree or strongly agree, respectively, and set conditions emphasize the positive aspects of employee engagement and retention in the banking sector.

**Table 3.** Frequencies of study variables.

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AI Adoption	5 (1.7%)	12 (4.0%)	35 (11.7%)	180 (60.0%)	68 (22.7%)
Big Data Adoption	2 (0.7%)	8 (2.7%)	30 (10.0%)	160 (53.3%)	100 (33.3%)
Job Satisfaction	3 (1.0%)	6 (2.0%)	25 (8.3%)	140 (46.7%)	126 (42.0%)
Organizational Culture	1 (0.3%)	5 (1.7%)	20 (6.7%)	160 (53.3%)	114 (38.0%)
Technological Readiness	4 (1.3%)	10 (3.3%)	40 (13.3%)	155 (51.7%)	91 (30.3%)
Employee Engagement	2 (0.7%)	3 (1.0%)	15 (5.0%)	175 (58.3%)	105 (35.0%)
Employee Retention	3 (1.0%)	7 (2.3%)	30 (10.0%)	145 (48.3%)	115 (38.3%)

### *Reliability and Validity*

Reliability analysis using Cronbach's alpha shows strong internal consistency for each variable in the study. AI Adoption had a Cronbach alpha of 0.84, indicating reliability on aspects such as ease of integration in HR systems, automation of routine tasks, improved decision making and performance evaluation. An improvement while Big Data Adoption exhibited a Cronbach Alpha of 0.79 to provide insights into employee behavior, predict employee flexibility, support employee planning, Job satisfaction, which reflects reliability on items related to formal development plans and empowerment, showed a high Cronbach alpha of 0.87, indicating consistency across dimensions assessing overall satisfaction, development opportunities diversity, feeling appreciated, and meaningful work. Technical readiness indicates effective interdependence communication from staff, and its explicitness in decision-making showed a Cronbach alpha of 0.81, indicating consistency in aspects of readiness will deal with AI, appropriate features of Big Data systems, appropriate employee training in new technologies, and IT infrastructure support. Overall employee retention (Cronbach's alpha = 0.85) testing enthusiasm for work, motivation towards organizational goals, desire to exceed job requirements, sense of autonomy and intention to stay with the organization and actively contribute to its success. These attest to the power of high confidence scores.

**Table 4.** Reliability analysis results and questionnaire items.

Construct	Cronbach's Alpha	Questionnaire Items
AI Adoption	0.84	- AI tools are effectively integrated into HR processes. - AI solutions help in automating routine HR tasks.

		- AI enhances decision-making in HR practices.
		- AI improves employee performance evaluations.
Big Data Adoption	0.79	- Big Data analytics provide valuable insights into employee behavior.
		- Big Data tools are used to predict employee turnover.
		- Big Data helps in strategic workforce planning.
		- Big Data supports personalized employee development plans.
Job Satisfaction	0.87	- I am satisfied with my current job.
		- My job provides me with growth opportunities.
		- I feel valued for the work I do in this organization.
		- I find my job challenging and meaningful.
Organizational Culture	0.82	- Our organizational culture supports innovation.
		- Employees are encouraged to adapt to technological changes.
		- Management communicates effectively with employees.
		- There is transparency in decision-making processes.
Technological Readiness	0.81	- Our organization is well-prepared to implement AI solutions.
		- We have sufficient resources to support Big Data initiatives.
		- Employees receive adequate training on new technologies.
		- IT infrastructure supports seamless integration of digital tools.
Employee Engagement	0.88	- I am enthusiastic about my work.
		- I am motivated to achieve organizational goals.
		- I am willing to go beyond the minimum requirements of my job.
		- I feel a strong sense of belonging to this organization.
Employee Retention	0.85	- I intend to stay with this organization for the foreseeable future.
		- I actively look for opportunities to contribute to the organization's success.

In developing the questionnaire, it was validated through content validity tests validated with the measurement model, and confirmed through confirmatory factor analysis (CFA).

#### *Correlation Analysis*

The correlation matrix shows the relationship between key variables in a study of banks in Jordan. AI adoption and big data adoption exhibit a strong positive correlation ( $r = 0.65$ ), indicating that organizations adopting AI technology are also likely to use big data analytics. Job satisfaction, AI adoption ( $r = 0.42$ ), big data acceptability ( $r = 0.38$ ), retention shows a positive moderate relationship with organizational culture ( $r = 0.59$ ), technical readiness ( $r = 0.54$ ), employee engagement ( $r = 0.67$ ), and employees ( $r = 0.63$ ), emphasizes the combination of organizational improvement and technology integration. Organizational culture is positively correlated with AI adoption ( $r = 0.55$ ), big data adoption ( $r = 0.49$ ), and other variables, emphasizing its role in supporting innovation and technology readiness plants. Employee engagement shows a strong correlation with organizational culture ( $r = 0.72$ ) and employee retention ( $r = 0.78$ ), indicating that a supportive culture and employee engagement are helpful for organizational stability. These findings highlight the importance of positively adopting AI and big data technologies to improve job satisfaction, organizational culture, employee engagement, and retention strategies in the bank in Jordan.

**Table 5.** Correlation matrix.

	AI Adoption	Big Data Adoption	Job Satisfaction	Organizational Culture	Technological Readiness	Employee Engagement	Employee Retention
AI Adoption	1.00	0.65	0.42	0.55	0.48	0.58	0.52
Big Data Adoption	0.65	1.00	0.38	0.49	0.45	0.53	0.49
Job Satisfaction	0.42	0.38	1.00	0.59	0.54	0.67	0.63
Organizational Culture	0.55	0.49	0.59	1.00	0.58	0.72	0.68
Technological Readiness	0.48	0.45	0.54	0.58	1.00	0.61	0.58

Employee Engagement	0.58	0.53	0.67	0.72	0.61	1.00	0.78
Employee Retention	0.52	0.49	0.63	0.68	0.58	0.78	1.00

## Discussion

The results show a strong positive relationship between AI and Big Data adoption, job satisfaction, organizational culture, technology readiness, employee engagement, and employee retention. Adoption of AI and Big Data significantly predicts employee engagement and retention, which is influenced by job satisfaction. The relationship is driven by organizational culture and technology readiness, emphasizing the key role it plays in improving the digital transformation efforts of HR management in banks in Jordan.

In general, the research provides real-world evidence supporting the transformational impact of AI and Big Data on HRM practices in the banking industry and highlights the importance of management systems and a supportive organizational environment for the profitability of this technology is greatly emphasized.

## Conclusion

This study examined the impact of the use of artificial intelligence (AI) and big data on employee engagement and retention in banks in Jordan. The study used partial least squares (PLS) structural equation modeling to assess the role of job satisfaction, the impact of organizational culture, and technology readiness. The results revealed a significant positive relationship with AI adoption, big data acceptance, job satisfaction, organizational culture, technological readiness, employee network, and employee retention as AI and big data technologies are important in improving HR practices in Jordanian banks. They enable greater efficiencies, individual employee experiences, and informed decision-making. In particular, the study highlights the importance of these technologies in predicting and increasing employee engagement and retention rates, thus helping organizations stabilize and expand.

## Limitations

Remember the following lesson: Despite its positive impact, this study has some limitations. To begin with, the cross-sectional nature of the data precludes the ability to establish causal relationships between variables. Future longitudinal research can provide detailed insights into the sustainable impact of the adoption of AI and Big Data in HRM. In addition, the sample was limited to Jordanian banks, potentially limiting the findings to other industries or sectors and resulting in possible response bias by relying on self-reported data also has been produced. Although anonymous surveys and assurances of confidentiality have been used to address this, the risk remains.

## Suggestions for Future Research

Based on these findings, several opportunities for future research emerge. First, examining the use of AI and Big Data in HRM across industries and geographies provides comparative insights into industry-specific challenges and opportunities. Longitudinal studies to track the evolution of digital HRM practices over time could provide a more comprehensive understanding of their long-term effects on employee outcomes and also, examine the mediating effects of other factors, such as leadership way or organization size get. Furthermore, qualitative research can complement quantitative findings by capturing nuanced employee perspectives on the use and integration of AI and Big Data in HR.

## Practical Implications

As such, this study highlights the importance of HR professionals and organizational leaders in Jordanian banks effectively integrating AI and Big Data technologies into HR practices. By fostering a supportive organizational culture and improving technology readiness, banks can optimize these technologies to increase employee satisfaction, engagement, and retention. Such initiatives not only contribute to competitive advantage but also strengthen banks' ability to attract and retain talent in a dynamic marketplace.

## References

Allen, D. G., Bryant, P. C., & Vardaman, J. M. (2010). Retaining talent: Replacing misconceptions with evidence-based strategies. *Academy of Management Perspectives*, 24(2), 48-64.

- Association of Banks in Jordan. (2023). Annual Report.
- Baker, J. (2012). The technology–organization–environment framework. In *Information systems theory* (pp. 231-245). Springer.
- Zhang, Y., Xu, S., Zhang, L., & Yang, M. (2021). Big data and human resource management research: An integrative review and new directions for future research. *Journal of Business Research*, 133, 34-50.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. Wiley.
- Buchanan, D., & Huczynski, A. (2019). *Organizational Behaviour*. Pearson Education.
- Central Bank of Jordan. (2023). *Statistical Bulletin*.
- Davenport, T. H. (2018). *The AI Advantage: How to Put the Artificial Intelligence Revolution to Work*. MIT Press.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of Management Review*, 21(3), 619-654.
- George, G., Haas, M. R., & Pentland, A. (2014). Big Data and Management. *Academy of Management Journal*, 57(2), 321-326.
- Jiang, K., Liu, H., & Sarker, S. (2022). Exploring the impact of AI on HRM: A multi-method study. *Human Resource Management Review*, 32(1), 100784.
- Jordanian Banking Association. (2022). *Survey on the Adoption of AI and Big Data in HRM*.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Rand McNally.
- Liang, S. W.-J., & Chung, K.-C. (2024). Silence or expression? Spiral of silence in social networks. *International Journal of Innovative Research and Scientific Studies*, 7(2), 343–353. <https://doi.org/10.53894/ijriss.v7i2.2627>
- Parasuraman, A. (2000). Technology Readiness Index (TRI): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies. *Journal of Service Research*, 2(4), 307-320.
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). Free Press.
- Schein, E. H. (1990). Organizational culture. *American Psychologist*, 45(2), 109-119.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25(3), 293-315.
- Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, K. (2015). The Influence of Technology on the Future of Human Resource Management. *Human Resource Management Review*, 25(2), 216-231.
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15-42.
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2), 273-315.
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading Digital: Turning Technology into Business Transformation*. Harvard Business Review Press.