

The effects of digital transformation, digital leadership, and entrepreneurial motivation on business decision making and business process performance: Evidence from greater Amman municipality

Ahmad Hanandeh^{a*}, Asmahan Majed Altaher^b, Mona Halim^c, Walaa Rezk^c, Naoufel Mahfoudh^c, Qais Hammouri^a, Saddam Rateb Darawsheh^c

^aApplied Science Private University, Jordan

^bAqaba University of Technology, Jordan

^cImam Abdulrahman Bin Faisal University, Saudi Arabia

CHRONICLE

ABSTRACT

Article history:

Received: December 12, 2022

Received in revised format: January 25, 2023

Accepted: March 15, 2023

Available online: March 15, 2023

Keywords:

Digital Transformation

Digital Leadership

Entrepreneurial Motivation

Decision Making Process

Business Process Performance

The purpose of this research was to examine the effects of digital transformation, digital leadership, and entrepreneurial motivation on business decision making and business process performance in the Greater Amman Municipality. The study's hypotheses were put to the test and proven through a variety of quantitative analysis and data processing techniques. The research hypotheses were evaluated using a Structural Equation Model. Participants in this research are managers from the middle and high echelons of the Greater Amman Municipality, who were responsible for making decisions in their respective divisions. One hundred and eighty middle and upper-level managers with at least eight years' experience in public service were recruited for this study from the Greater Amman Municipality. Distributed questionnaires and the deliberate sampling technique were used to compile this data. Decision making had a positive effect on the business process performance, and the results of hypothesis testing data processing using Structural Equation Model indicated that digital transformation, digital leadership, and the motivation of the business environment all had positive and significant effects on business decision making and business process performance in the Greater Amman Municipality. To conduct their research, the authors opted to focus on digital transformation, which includes four primary components: process transformation, business model change, domain transformation, and cultural transformation. The following dimensions commander, communicator, collaborator, and co-creator were all indicative of digital leadership. Entrepreneurial motivation could be seen in the word's communication, hassle-free work environment, mastering the art of constructive criticism, and trust among others. The novel aspect of this study is the model developed to explain the interplay between digital transformation, digital leadership, and entrepreneurial motivation, and how these factors influence business decision making and business process performance at Greater Amman Municipality.

1. Introduction

Greater Amman Municipality is a public entity responsible for the most common public services in the Jordanian capital, Amman, and its employees and managers must grasp the significance of working hard and always making rational decisions (Al-Hyasat, 2022). The ability of Greater Amman Municipality to support the improvement of the quality of its services is largely attributed to the municipality's ability to make sound decisions (Asad & Jawad, 2022). Providing businesses with auxiliary tools, such as resources, sources, and technology tools, which enable managers and staff to execute the essential work and boost their confidence and job

* Corresponding author.

E-mail address: a_hanandeh@asu.edu.jo (A. Hanandeh)

ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print)

© 2023 by the authors; licensee Growing Science, Canada.

doi: 10.5267/j.ijds.2023.3.014

satisfaction (Asad & Jawad, 2022). The manager's understanding of dealing with challenges, internal and external environments, employees, and end customers is vital to the decision-making process (citizens and private enterprises). The decision-making process is characterized by the timely fulfillment of employee-responsible duties, as well as dedication, enthusiasm, skill, perseverance, initiative, and high levels of inventiveness. According to Wibowo et al. (2020), entrepreneurial motivation is one of the factors that must be considered. If managers and employees feel satisfaction at work, it will create an atmosphere of togetherness, with the same responsibilities, a good communication climate, and high morale, allowing for the optimal achievement of organizational goals. According to Hyun et al. (2020), making a good decision reflects on the manager and employee's trust, which makes a significant contribution to organizational success. Furthermore, when employees receive feedback on the outcomes of their job, they will feel satisfied (Hammouri & Abu-Shanab, 2017; Hyun et al., 2020).

Digital transformation (DT) has been changed from an opportunity to become an urgent need for meeting the demands and expectations (Kraus et al., 2021). DT's are affected by improving processes and mechanisms in most of firms' core business structures. Heavin & Power (2018) summarized that digital transformation proved its capabilities on solving problems within firms, whereas Hess et al. (2016) say organizations that do not quickly create and implement DT strategies won't be able to compete in the new digital world. Like any transformation process, the adjustment to this new reality is risky and difficult (Vial, 2019). According to Deline (2019), 70% of significant organizational changes fail (Ahmad et al., 2022). Companies are sluggish to change (Hammouri et al., 2022), making DT adoption and implementation less likely. Kane et al. (2021) argue that technology is a strategy, not a driver of DT. However, the COVID-19 epidemic showed how DT rapidly adapts to an external catastrophe (Hanandeh et al., 2021). DT challenges firms and national economies (Ahmad et al., 2022).

The continuous optimization as a corporation capable of perceiving and reacting quickly to market changes is one of DT main goals. The type of transformation needs a set of steps and time to arrive at an ideal transformation. Digitization helps firms mainly in doing businesses and developing firms' capabilities for improving the way of doing activities. Improving managers' capabilities and knowledge areas that they have need from managers to become digital leaders based on the digital transformation to give managers to plan and execute operations and activities in the goal of digitalization, empower their employees to be able on achieving goals and conduct businesses, accept changes, and create new strategic plans that balance technology and human factors. Applying and adopting technology is important for increasing productivity, creating values, and having digital leaders who can facilitate digital transformation. The ability to lead an organization for achieving goals and having more competitive advantages is the definition of leadership concept (Hammouri & Abu-Shanab, 2021).

The strong competitions forced organizations to have more competitive advantages, and need more effective and digital products that affect production, communication with end customers, and decreasing costs (Ural et al., 2020). In our days, most organizations need to have leaders who are flexible, informational, flexible with employees, team-oriented, and adopt teamwork with a strong focus on producing new products and services. Describing the meaning of digital leadership as a process that necessitates an agile IT and business architecture in order to rapidly transform ideas to become real, and having an innovation culture (Ahmad et al., 2022). Also, another definition for digital leadership as a social influence process assisted by technology that can occur at any organizational level and is meant to help employees develop their capabilities and performance. Digital leadership proved that it is the result of the digital environment, and talent (Hammouri et al., 2021). The importance of digital leadership lies in achieving the integration between using information technology at the same time with using human resources in creative and new ways. In the age of digital technology, employees, teams, and firms can transform entire organizations, and employees to become digital and creative innovators by watching and tracking digital insight, digital decisions, digital marketing implementation, and innovative rules to achieve their objectives (Ahmad et al., 2021; Ural, 2022).

Individual characteristics that contribute to the success of entrepreneurship are referred to as entrepreneurial innovation. These capabilities can be put to use to give a company a durable advantage in the market, allowing it to achieve success (Fayzhall et al., 2022). Motivation to take risks and pursue new opportunities is a key factor in determining the level of success achieved by small businesses (Anwar, 2022). Directly or indirectly, entrepreneurs acquire firm ownership by their patterns of behavior; the level of motivation an individual possesses has a significant impact on the level of success that a company achieves, particularly in the setting of micro-entrepreneurship (Subagia et al., 2022). Motivation to be an entrepreneur can enrich an entrepreneur's behavioral pattern, which in turn can have a positive impact on the performance of a business (Cetin et al., 2022). Most organizations fail mainly due to various challenges such as their inability to sustain themselves, either because of a lack of the managerial and competency skills, or because of having fewer resources, etc. Micro-enterprises act as a platform to enhance the skills of entrepreneurs and have a significant contribution to the economy through the generation of employment, income, and community development. However, micro-enterprises also have a significant impact on the economy through the generation of employment and income (Srimulyani & Hermanto, 2022).

In contrast to the management of a company's products and services, which is described by its business procedures, the managerial decisions that go into determining the firm's possible courses of action are affected by the quality of the managers' decision-making. As a result, decision-making can affect changing business processes in order to provide new products based on customers' needs, and aids in integrating them with new technology (Torlak et al., 2022), all of which contribute

to improved business process performance. When evaluating a company's success, one looks at how well its business processes are performing in terms of their profits and outcomes including adaptability, reliability, responsiveness, and costs/assets (Hammouri et al., 2022; Torlak et al., 2022). In a similar vein, business processes analyze existing operations with the goal of optimizing them. Business models are enhanced, making companies more competitive in the market. An efficient decision-making process allows for the realization of economies of scale and knowledge synergies across a variety of organizational configurations, as well as the easier seizing of opportunities in both dynamic and static settings. Insight into future market activity, for instance, could spark the development of new company procedures and lead to altered approaches to performance (Abubakar et al., 2019). Knowledge is drawn from a variety of sources, including IT resource, managerial resource, and business processes' resource, because business processes entail diverse and complicated situations (Torlak et al., 2022). As a result, we anticipate a causal link between sound decision-making and productive business operations.

2. Hypothesis Development

The effects of Digital Transformation on Decision Making Process, and Business Process Performance

Korherr et al. (2022), Brdese and Alsaggaf (2022) and Rodrigues et al. (2022) summarized that digital transformation effects positively on decision making process. Also, Ahmed et al. (2021), Kitsios and Kamariotou (2021) and McCarthy et al. (2021) that digital transformation positively effects on decision making process. Furthermore, Bag et al. (2020), Baiyere et al. (2020) and Fenech et al. (2019) that digital transformation effects positively on business process performance.

H₁: *Digital Transformation (DT) has a positive effect on Decision Making Process (DMP).*

H₂: *Digital Transformation (DT) has a positive effect on business process performance (BPP).*

The effects of Digital Leadership and Decision Making Process, and Business Process Performance

Borah et al. (2022), and Henderik and Stoffers (2022) summarized that Digital Leadership effects positively on decision making process, in addition, Karakose et al. (2021), Patel (2020) and Sheninger (2019) summarized that Digital Leadership positively effects on decision making process. Additionally, Aguiar et al. (2019), ElSawy et al. (2020) and Cahyadi and Magda (2021) agreed that digital leadership effects positively on business process performance.

H₃: *Digital Leadership (DL) has a positive effect on Decision Making Process (DMP).*

H₄: *Digital Leadership (DL) has a positive effect on business process performance (BPP).*

The relationship between Entrepreneurial Motivation and Decision-Making Process and Business Process Performance

Akinboye and Morrish (2022), Akulava and Guerrero (2022) and Jing (2022) summarized that entrepreneurial motivation effects positively on decision making process. Also, Ahmad et al. (2021), Winnaar and Scholtz (2020) and Su et al. (2020) that entrepreneurial motivation positively effects on decision making process. Moreover, Jafari-Sadeghi et al. (2020), Eniola (2021) and Srimulyani and Hermanto (2022) agreed that Entrepreneurial Motivation effects positively on business process performance.

H₅: *Entrepreneurial Motivation (EM) has a positive effect on Decision Making Process (DMP).*

H₆: *Entrepreneurial Motivation (EM) has a positive effect on business process performance (BPP).*

The relationship between Decision Making Process (DMP) and Business Process Performance (BPP)

Abuezhayeh et al. (2022), Grisold et al. (2022) and Lee et al. (2022) agreed that Decision making process effects positively on business process performance. Also, Aydiner et al. (2019a), Aydiner et al. (2019b) and Zelt et al. (2019) agreed that decision making process positively effects on business process performance.

H₇: *Decision Making Process (DMP) has a positive effect on Business Process Performance (BPP).*

Based on previous studies and reviews, the following research model:

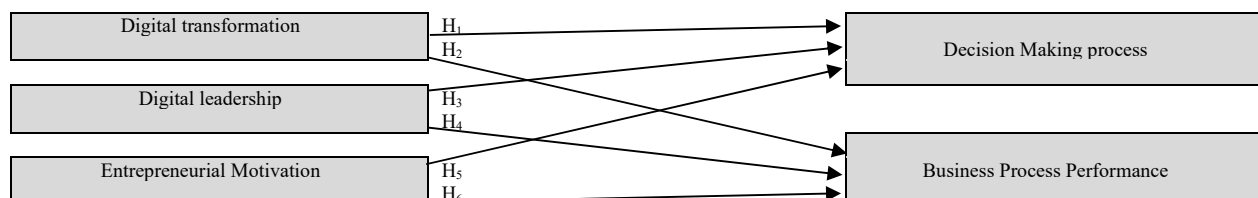


Fig. 1. The proposed study

3. Research Methodology

Using a five-point Likert scale (1 = Strongly Disagree; 2 = Disagree; 3 = neutral; 4 = Agree; and 5 = Strongly Agree), a

research survey was created on Google Drive and distributed to participants. Structural Equation Model is used to statistically discuss the research hypotheses by the researcher. The data was checked and filtered, and the responses of 180 participants were approved for analysis and discussion of the study's hypotheses. At the end of the day, we had ten times as many samples as predictors.

4. Research Results

The following table displays the results of a reliability analysis, which was performed using the composite reliability values (the average of the retrieved variables) and a Cronbach alpha of 0.50 or above. In addition, the data in the table below supports the validity of the evaluation-based research approach, allowing us to go on to a discussion of the hypotheses underlying the study.

Table 1
Reliability and validity test

Code	Variable	Factor's Loading	VIF
Digital Transformation (DT) (Cronbach's Alpha: 0.595, CR: 0.713, AVE: 0.679)			
DT1	Process Transformation	0.621	1.543
DT2	Business Model Change	0.589	1.345
DT3	Domain Transformation	0.631	1.596
DT4	Cultural Transformation	0.541	1.278
Digital Leadership (DL) (Cronbach's Alpha: 0.624, CR: 0.743, AVE: 0.615)			
DL1	Commander	0.556	1.369
DL2	Communicator	0.691	1.372
DL3	Collaborator	0.681	1.247
DL4	Co-creator	0.570	1.568
Entrepreneurial Motivation (EM) (Cronbach's Alpha: 0.584, CR: 0.651, AVE: 0.632)			
EM1	Words Communication	0.686	1.821
EM2	Hassle-free Work Environment	0.610	1.254
EM3	Mastering the art of Constructive Criticism	0.513	1.378
EM4	Trust	0.528	1.484
Decision Making Process (DMP) (Cronbach's Alpha:0.747, CR: 0.576, AVE: 0.556)			
DMP1	System	0.814	1.597
DMP2	Support	0.676	2.467
DMP3	Managerial Decision	0.753	1.793
Business Process Performance (BPP) (Cronbach's Alpha: 0.650 , CR: 0.769, AVE: 0.759)			
BPP1	Revenue Growth	0.575	1.432
BPP2	Profit margin	0.723	1.542
BPP3	Customer Satisfaction	0.654	1.865

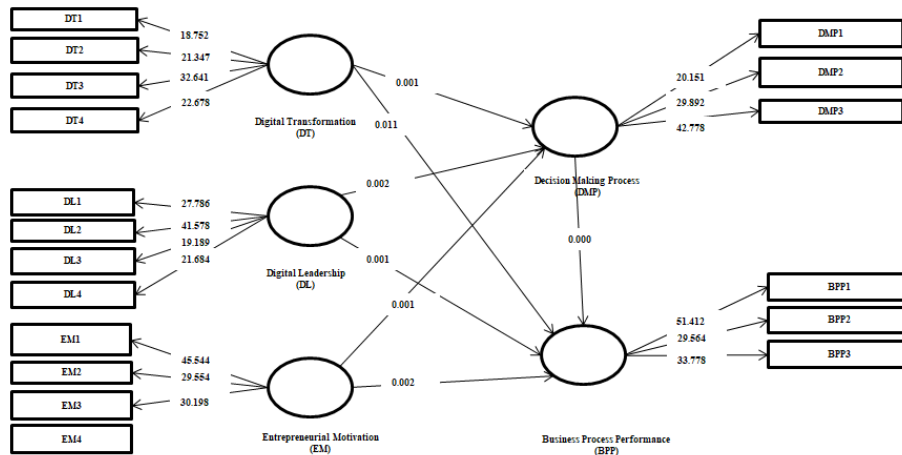


Fig. 1. The results

4.1 Research Hypotheses Test

In Table 1, we can see the direct impacts and interrelationships of all the accepted search hypotheses.

Table 1
Hypotheses Results

Hypotheses	P-value	Significance
H1: Digital Transformation (DT) → Decision Making Process (DMP)	0.001	Supported
H2: Digital Transformation (DT) → Business Process Performance (BPP)	0.011	Supported
H3: Digital Leadership (DL) → Decision Making Process (DMP)	0.002	Supported
H4: Digital Leadership (DL) → Business Process Performance (BPP)	0.001	Supported
H5: Entrepreneurial Motivation (EM) → Decision Making Process (DMP)	0.001	Supported
H6: Entrepreneurial Motivation (EM) → Business Process Performance (BPP)	0.002	Supported
H7: Decision Making Process (DMP) → Business Process Performance (BPP)	0.000	Supported

Note: **, p-value < 0.05. Significant at the 0.05 level.

H1: *Digital Transformation (DT) has a positive effect on Decision Making Process (DMP).*

H2: *Digital Transformation (DT) has a positive effect on business process performance (BPP).*

Based on table above P-value of $0.001 < 0.050$ calculated from data processing with Structural Equation Model suggests that the digital transformation has positively impact on the Greater Amman Municipality's decision-making process. This shows that Greater Amman Municipality's decision-making process will improve if they digitize their processes. According to Korherr et al. (2022), digital transformation positively impacted the decision-making process; thus, these findings are compatible with that conclusion. On the basis of P-values which equal to $0.011 < 0.050$, which were established using the Structural Equation Model for hypothesis testing, it was also determined that digital transformation had a positively impact on business process performance in Greater Amman Municipality. Therefore, enhancing Business Process Performance is contingent upon the Greater Amman Municipality initiating the digitization of its activities. These results confirm the findings of Bag et al. (2020), who discovered that digital transformation has a positively impact on the efficiency of organizational processes.

H3: *Digital Leadership (DL) has a positive effect on Decision Making Process (DMP).*

H4: *Digital Leadership (DL) has a positive effect on business process performance (BPP).*

Using the Structural Equation Model to analyze the data, we got a P-value of $0.002 < 0.050$. This shows that digital leadership positively impacts how decisions are made at Greater Amman Municipality. This means that the way decisions are made in Greater Amman Municipality will get better if the managers start to act like leaders. These results back up what others found in 2012, which was that digital leadership had a positive effect on the decision-making process. These results are also in line with that finding. Using the Structural Equation Model to test hypotheses, it was also found that digital leadership had a positive impact on improving business process performance in Greater Amman Municipality. The P-values = $0.001 < 0.050$ for Business Process Performance to get better, the Greater Amman Municipality needs to switch from being a manager to a leader in the way it runs businesses. Cahyadi and Magda found in 2021 that digital leadership positively impacts the efficiency of business process performance. These results back up what they found.

H5: *Entrepreneurial Motivation (EM) has a positive effect on Decision Making Process (DMP).*

H6: *Entrepreneurial Motivation (EM) has a positive effect on business process performance (BPP).*

Data analysis using Structural Equation Model has a significant impact of entrepreneurial motivation on decision making in Greater Amman Municipality ($P = 0.001 < 0.050$). It follows that Greater Amman Municipality would benefit from better decision-making if it began encouraging its workers to think and act more like entrepreneurs. These results are congruent with those of Akinboye and Morrish (2022), who found that entrepreneurial motivation positively impacted the decision-making process. Using the Structural Equation Model program for hypothesis testing, it was also found that Entrepreneurial Motivation had a significant and large influence on improving business process performance in Greater Amman Municipality, with P-values = $0.001 < 0.050$. For this reason, it is essential that the Greater Amman Municipality initiate initiatives to inspire new approaches to running businesses. Srimulyani and Hermanto (2022) found that entrepreneurial motivation has a positive impact on the effectiveness of business process performance, and their results confirm their findings.

H7: *Decision Making Process (DMP) has a positive effect on Business Process Performance (BPP).*

Decision making process has a positive impact on business process performance in Greater Amman Municipality, as indicated by a P-value of $0.001 < 0.050$ generated from data processing with Structural Equation Model. The results of this study reveal that the Greater Amman Municipality's decision-making process positively impacts the efficiency of the city's operational procedures. Abuezhayeh et al. (2022) discovered that the decision-making process positively impacted the performance of the business processes, and these results are consistent with that conclusion.

5. Conclusion

Using Structural Equation Model for hypothesis testing, we have found that the presence of a digital leadership position; the presence of an entrepreneurial drive; and the rate at which technological advancements positively affected the quality of decisions made and the efficiency with which businesses operate in the Greater Amman Municipality.

Acknowledgment

The authors would like to thank the Applied Science Private University for supporting the success of this research.

References

- Abubakar, A. M., Elrehail, H., Alatailat, M. A., & Elçi, A. (2019). Knowledge management, decision-making style and organizational performance. *Journal of Innovation & Knowledge*, 4(2), 104-114.
- Abuezhayeh, S. W., Ruddock, L., & Shehabat, I. (2022). Integration between knowledge management and business process management and its impact on the decision making process in the construction sector: A case study of Jordan. *Construction Innovation*, 22(4), 987-1010.
- Agistiawati, E., Asbari, M., Basuki, S., Yuwono, T., & Chidir, G. (2020). Exploring the Impact of Knowledge Sharing and Organizational Culture on Teacher Innovation Capability. *International Journal of Science and Management Studies (IJSMS)*, 3(3), 62-77.
- Aguiar, T., Gomes, S. B., da Cunha, P. R., & da Silva, M. M. (2019). Digital transformation capability maturity model framework. In *2019 IEEE 23rd International Enterprise Distributed Object Computing Conference (EDOC)* (pp. 51-57). IEEE.
- Ahmad, H., Hanandeh, R., Alazzawi, F., Al-Daradkah, A., ElDmrar, A., Ghaith, Y., & Darawsheh, S. (2023). The effects of big data, artificial intelligence, and business intelligence on e-learning and business performance: Evidence from Jordanian telecommunication firms. *International Journal of Data and Network Science*, 7(1), 35-40.
- Ahmad, H., Maram, A., Raed, H., Alamajali, D., & Hajj, M. (2022). The effect of information system on organizational performance and entrepreneurship management in a Zain telecommunication firm. *Journal of Southwest Jiaotong University*, 57(6).
- Ahmad, H., Rami, H., Maram, A., Raed, H., & Mustafa, H. (2022). The Impact of Self-Efficacy, Mobility, and Benefits Awareness on adoption of mobile banking applications in Jordan. *Central European Management Journal*, 30(4), 2034-2038.
- Ahmad, M., Shah, S. Z. A., & Abbass, Y. (2021). The role of heuristic-driven biases in entrepreneurial strategic decision-making: evidence from an emerging economy. *Management Decision*, 59(3), 669-691.
- Ahmed, A., Alshurideh, M., Al Kurdi, B., & Salloum, S. A. (2021). Digital transformation and organizational operational decision making: a systematic review. In *Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2020* (pp. 708-719). Springer International Publishing.
- Akinboye, A. K., & Morrish, S. C. (2022). Conceptualizing post-disaster entrepreneurial decision-making: Prediction and control under extreme environmental uncertainty. *International Journal of Disaster Risk Reduction*, 68, 102703.
- Akulava, M., & Guerrero, M. (2022). Entrepreneurial gendered ambidexterity in Belarusian SMEs. *The Journal of Technology Transfer*, 1-26.
- Al-Hyasat, H. K. A. (2022). The Role of Success Factors for Using Information Systems in Achieving Organizational Excellence in the Greater Amman Municipality. *Jordan Journal of Business Administration*, 18(3).
- Anwar, I., Alalayani, W. R., Thoudam, P., Khan, R., & Saleem, I. (2022). The role of entrepreneurship education and inclination on the nexus of entrepreneurial motivation, individual entrepreneurial orientation and entrepreneurial intention: testing the model using moderated-mediation approach. *Journal of Education for Business*, 97(8), 531-541.
- Asad, A. M., & Jawad, M. K. (2022, August). Comparison of municipal indicators (solid waste, wastewater, pure water supply) for Baghdad and Amman cities according to (ISO 37120: 2014-Sustainable development of communities). In *AIP Conference Proceedings* (Vol. 2437, No. 1, p. 020002). AIP Publishing LLC.
- Aydiner, A. S., Tatoglu, E., Bayraktar, E., & Zaim, S. (2019a). Information system capabilities and firm performance: Opening the black box through decision-making performance and business-process performance. *International Journal of Information Management*, 47, 168-182.
- Aydiner, A. S., Tatoglu, E., Bayraktar, E., Zaim, S., & Delen, D. (2019b). Business analytics and firm performance: The mediating role of business process performance. *Journal of business research*, 96, 228-237.
- Bag, S., Wood, L. C., Mangla, S. K., & Luthra, S. (2020). Procurement 4.0 and its implications on business process performance in a circular economy. *Resources, conservation and recycling*, 152, 104502.
- Baiyere, A., Salmela, H., & Tapanainen, T. (2020). Digital transformation and the new logics of business process management. *European Journal of Information Systems*, 29(3), 238-259.
- Bernarto, I., Bachtar, D., Sudibjo, N., Suryawan, I. N., Purwanto, A., & Asbari, M. (2020). Effect of Digital Transformational Leadership, perceived organizational support, job satisfaction toward life satisfaction: Evidences from Indonesian teachers. *International Journal of Advanced Science and Technology*, 29(3), 5495-5503.
- Borah, P. S., Iqbal, S., & Akhtar, S. (2022). Linking social media usage and SME's sustainable performance: The role of digital leadership and innovation capabilities. *Technology in Society*, 68, 101900.
- Brdesee, H., & Alsaggaf, W. (2022). Decision-Making Strategy for Digital Transformation: A Two-Year Analytical Study and Follow-Up Concerning Innovative Improvements in University e-Services. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(1), 138-164.
- Cahyadi, A., & Magda, R. (2021). Digital leadership in the economies of the G20 countries: A secondary research. *Economies*, 9(1), 32.
- Cahyono, Y., Novitasari, D., Sihotang, M., Aman, M., Fahlevi, M., Nadeak, M., Siahaan, M., Asbari, M., & Purwanto, A. (2020). The Effect of Digital Transformational Leadership Dimensions on Job Satisfaction and Organizational Commitment: Case Studies in Private University Lecturers. *Solid State Technology*, 63(1s), 158-184.
- Cetin, G., Altinay, L., Alrawadieh, Z., & Ali, F. (2022). Entrepreneurial motives, entrepreneurial success and life satisfaction of refugees venturing in tourism and hospitality. *International Journal of Contemporary Hospitality Management*, 34(6), 2227-2249.

- Deline, M. B. (2019). Framing resistance: identifying frames that guide resistance interpretations at work. *Management Communication Quarterly*, 33(1), 39-67.
- De Winnaar, K., & Scholtz, F. (2020). Entrepreneurial decision-making: new conceptual perspectives. *Management Decision*, 58(7), 1283-1300.
- Duan, C., & Sandhu, K. (2022). Immigrant entrepreneurship motivation—scientific production, field development, thematic antecedents, measurement elements and research agenda. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(5), 722-755.
- EISawy, O. A., Kræmmergaard, P., Amsinck, H., & Vinther, A. L. (2020). How LEGO built the foundations and enterprise capabilities for digital leadership. In *Strategic information management* (pp. 174-201). Routledge.
- Eniola, A. A. (2021). The entrepreneur motivation and financing sources. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 25.
- Fayzhall, M., Asbari, M., Purwanto, A., Goestjahjanti, F. S., Yuwono, T., Radita, F. R., Yulia, Y., Cahyono, Y., & Suryani, Fazal, S. A., Al Mamun, A., Alshebami, A. S., Muniady, R., Ali, M. H., Al Shami, S. S. A., ... & Algobaei, F. (2022). Entrepreneurial motivation, competency and micro-enterprise sustainability performance: Evidence from an emerging economy. *Sustainability*, 14(19), 12615.
- Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *Journal of Management Information & Decision Sciences*, 22(2).
- Grisold, T., Groß, S., Stelzl, K., vom Brocke, J., Mendling, J., Röglinger, M., & Rosemann, M. (2022). The five diamond method for explorative business process management. *Business & Information Systems Engineering*, 64(2), 149-166.
- Hair, J. F., Harrison, D., & Risher, J. J. (2018). Marketing research in the 21st century: Opportunities and challenges. *Brazilian Journal of Marketing-BJMkt, Revista Brasileira de Marketing-ReMark, Special Issue*, 17.
- Hammouri, Q. M., Abu-Shanab, E. A., & Nusairat, N. M. (2021). Attitudes toward implementing E-government in health insurance administration. *International Journal of Electronic Government Research (IJEGR)*, 17(2), 1-18.
- Hammouri, Q., & Abu-Shanab, E. (2017). Exploring the factors influencing employees' satisfaction toward e-tax systems. *International Journal of Public Sector Performance Management*, 3(2), 169-190.
- Hammouri, Q., & Abu-Shanab, E. A. (2020). Major factors influencing the adoption of cloud computing in Jordan. *International Journal of Technology and Human Interaction (IJTHI)*, 16(4), 55-69.
- Hammouri, Q., Altaher, A. M., Rabaa'i, A., Khataybeh, H., & Al-Gasawneh, J. A. (2022). Influence OF Psychological Contract Fulfillment on Job Outcomes: A Case of the Academic Sphere In Jordan. *Problems and Perspectives in Management*, 20(3), 62-71.
- Henderik, M., & Stoffers, J. (2022). An exploratory literature study into digital transformation and leadership: Toward future-proof middle managers. *Sustainability*, 14(2), 687.
- Hyun, C. C., Wijayanti, L. M., Asbari, M., Purwanto, A., Santoso, P. B., Igak, W., Bernarto, I., & Pramono, R. (2020). Implementation of contextual teaching and learning (CTL) to improve the concept and practice of love for faith-learning integration. *International Journal of Control and Automation*, 13(1), 365-383.
- Jafari-Sadeghi, V., Dutta, D. K., Ferraris, A., & Del Giudice, M. (2020). Internationalisation business processes in an under-supported policy contexts: evidence from Italian SMEs. *Business Process Management Journal*, 26(5), 1055-1074.
- JING, W. (2022). A Review Study on Entrepreneurial Intention, Educational Learning Settings, and Learning Motivation in Entrepreneurship Education. *Higher Education and Oriental Studies*, 2(4).
- Judge, T. A., Zhang, S. C., & Glerum, D. R. (2020). Job satisfaction. Essentials of job attitudes and other workplace psychological constructs, 207-241.
- Karakose, T., Polat, H., & Papadakis, S. (2021). Examining teachers' perspectives on school principals' digital leadership roles and technology capabilities during the COVID-19 pandemic. *Sustainability*, 13(23), 13448.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). Strategy, not technology, drives digital transformation. *MIT Sloan Management Review*.
- Kitsios, F., & Kamariotou, M. (2021). Artificial intelligence and business strategy towards digital transformation: A research agenda. *Sustainability*, 13(4), 2025.
- Korherr, P., Kanbach, D. K., Kraus, S., & Mikalef, P. (2022). From intuitive to data-driven decision-making in digital transformation: A framework of prevalent managerial archetypes. *Digital Business*, 2(2), 100045.
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63, 102466.
- Lee, K., Romzi, P., Hanaysha, J., Alzoubi, H., & Alshurideh, M. (2022). Investigating the impact of benefits and challenges of IOT adoption on supply chain performance and organizational performance: An empirical study in Malaysia. *Uncertain Supply Chain Management*, 10(2), 537-550.
- McCarthy, P., Sammon, D., & Alhassan, I. (2021). Digital transformation leadership characteristics: A literature analysis.
- Patel, R. (2020). A future of digital leadership that is behavioural by design. *Future Healthcare Journal*, 7(3), 194.
- Rodrigues, A. R. D., Ferreira, F. A., Teixeira, F. J., & Zopounidis, C. (2022). Artificial intelligence, digital transformation and cybersecurity in the banking sector: A multi-stakeholder cognition-driven framework. *Research in International Business and Finance*, 60, 101616.
- Barakat, S., Yaghi, K., & Al-Zagheer, H. (2022). The Use of NFT for Patent Protection. *Advances in Dynamical Systems and Applications*, 17(1), 107-113.
- Santoso, P. B., Asbari, M., Purwanto, A., Wijayanti, L. M., Hyun, C. C., Maesaroh, S., Fayzhall, M., Chidir, G., Mustofa, Hutagalung, D., & Yani, A. (2020). Working while studying at university in the self-management perspective: An ethnographic study on java ethnic employees. *International Journal of Control and Automation*, 13(2), 299-308.
- Sheninger, E. (2019). *Digital leadership: Changing paradigms for changing times*. Corwin Press.

- Srimulyani, V. A., & Hermanto, Y. B. (2022). Impact of entrepreneurial self-efficacy and entrepreneurial motivation on micro and small business success for food and beverage sector in east Java, Indonesia. *Economies*, 10(1), 10.
- Subagia, H., Riono, S. B., Indriyani, A., & Syaifulloh, M. (2022). Does the Family Environment and Entrepreneurship Education Promote Students' Entrepreneurial Intentions?: The Mediating Role of Entrepreneurial Motivations. *Italianisch*, 12(1), 306-313.
- Torlak, N. G., Demir, A., & Budur, T. (2022). Decision-making, leadership and performance links in private education institutes. *Rajagiri Management Journal*, 16(1), 63-85.
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The journal of strategic information systems*, 28(2), 118-144.
- Vizano, N. A., Utami, W., Johanes, S., Herawati, A., Aima, H., Sutawijaya, A. H., ... & Elmi, F. (2020). Effect of Career, Organizational Commitment on Turnover Intention through Mediation of Organizational Culture: Evidence from Indonesian Companies. *Systematic Reviews in Pharmacy*, 11(9).
- Wibowo, T. S., Badi'ati, A. Q., Annisa, A. A., Wahab, M. K. A., Jamaludin, M. R., Rozikan, M., ... & Muhaini, A. (2020). Effect of Hard Skills, Soft Skills, Organizational Learning and Innovation Capability on Islamic University Lecturers' Performance. *Systematic Reviews in Pharmacy*, 11(7).
- Zelt, S., Recker, J., Schmiedel, T., & vom Brocke, J. (2019). A theory of contingent business process management. *Business Process Management Journal*, 25(6), 1291-1316.



© 2023 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).