

THE IMPACT OF BUSINESS INTELLIGENCE AND BUSINESS PROCESS AGILITY ON ACHIEVING COMPETITIVE ADVANTAGE Muhammad Alshurideh. Barween Al Kurdi, Ali Alzoubi, Ahmad AlHamad	1
CRITICAL SUCCESS FACTORS TO IMPROVE THE PERFORMANCE OF SERVICE OPERATIONS Barwage Al Kurdi Muhammed Alshuridah Samar Hamadnah Havron Alchuridah	18
IMPACT OF DYNAMIC CAPABILITIES AND PROCESS IMPROVEMENT ON PROCESS QUALITY	39
impact of inventory management and service strategy on service process	59
IMPROVEMENT IN HOSPITALITY SECTOR Samer Hamadneh, Muhammad Alshurideh, Barween Al Kurdi, Hevron Alshurideh	79
IMPACT OF INFORMATION TECHNOLOGY CAPABILITIES AND EFFECTIVE INVENTORY MANAGEMENT ON ENHANCED SERVICE DELIVERY IN HOSPITALITY SECTOR Iman Akour, Barween Al Kurdi, Muhammad Alshurideh, Ahmad AlHamad	
THE IMPACT OF LEAN PRACTICES AND AGILE PRACTICES ON PROCESS QUALITY Ali Alzoubi, Muhammad Alshurideh, Iman Akour, Barween Al Kurdi	100
IMPACT OF EFFECTIVE ORDER MANAGEMENT AND USE OF INFORMATION TECHNOLOGY IN SERVICE OPERATIONS IN ENHANCING SERVICE QUALITY LEVEL IN HOSPITALITY INDUSTRY Muhammad Alshurideh, Hevron Alshurideh, Ali Alzoubi, Barween Al Kurdi	118
THE IMPACT OF SERVICE QUALITY AND SERVICE TRANSPARENCY ON CUSTOMER SATISFACTION Muhammad Alshurideh, Wasfi, Alrawabdeh, Barween Al Kurdi, Ali Alzoubi	173
IMPACT OF SERVICE STRATEGY AND SERVICE QUALITY ON OPERATIONS EFFICIENCY Muhammad Alshurideh, Barween Al Kurdi, Ali Alzoubi, Hevron Alshurideh	155
IMPACT OF SERVICE TRANSPARENCY AND SERVICE CONTROL ON COMPETITIVENESS Barween Al Kurdi, Muhammad Alshurideh, Hevron Alshurideh	174
Clobal Academic Forum	
on Technology, Innovation and Management	

# gaftim.com

https://journals.gaftim.com/index.php/ijtop/issue/view/9

# <u>Editors-in-Chief</u>

Prof. Haitham M. Alzoubi, Skyline University College, UAE Dr. Taher M. Ghazal, Skyline University College, UAE

#### <u>Associate Editors</u>

Dr. Neyara Radwan, King AbdulAziz University, KSA Prof. Tariq Rahim Soomro, IoBM, Acting Rector, Pakistan Dr. Hussam Al Hamadi, Khalifa University, UAE Eng. Munir Ahmad, National College of Business Administration & Economics, Pakistan

#### Editorial Board

Dr. Sagheer Abbas, National College of Business Administration & Economics, Pakistan Dr. Fatma Taher, Zayed University, UAE Dr. Mohammad Alshurideh, University of Sharjah, UAE Prof. Khaled Shaalan, British University in Dubai, UAE Dr. Mohammed Afifi, Creative Ideas, Seminars & Conferences, UAE Prof. Zarina Shukur, Universiti Kebangsaan, Malaysia Dr. Raed A. Said, Canadian University Dubai, UAE Dr. Chan Yeun, Khalifa University, UAE Dr. Songkyoo Kim, Khalifa University, UAE Dr. Abdulhadi Shoufan, Khalifa University, UAE Prof. Nuha El-Khalili, Petra University, Jordan Dr. Mohammad Kamrul Hasan, Universiti Kebangsaan, Malaysia Dr. Siti Norul Huda Abdullah, Universiti Kebangsaan, Malaysia Dr. Khairul Azmi Abu Bakar, Universiti Kebangsaan, Malaysia Dr. Ghassan Issa, Skyline University College, UAE Dr. Naseem Abidi, Skyline University College, UAE Dr. Khouloud Khaled Eledlebi, Khalifa University, UAE Dr. Laith Abualigah, Amman Arab University, Jordan Dr. Karamath Ateeq, Skyline University College, UAE Dr. Manas Pradhan, Skyline University College, UAE Dr. Beenu Mago, Skyline University College, UAE Dr. Muhammad Adnan Khan, Gachon University, South Korea Prof. Syed Naqvi, Mohawk College, Canada Dr. Sarfraz Nawaz Brohi, Monash University, Malaysia Prof. M. Nawaz Brohi , Bathspa University, UAE Dr. Nasser Taleb, Canadian University Dubai, UAE Dr. Adel Abusitta, McGill University , Canada Prof. Abdulsattar Al Ali, Dr. Kanayalal Rania Inc., Canada Dr. Yingli Wang, Cardiff University, UK Prof. Mona Badran, Cairo University Egypt Prof. Alma Emerita, Far Eastern University Roosevelt, Philippines Prof. Eiad Yafi, Institute of Business Timor-Leste Dr. Noor Zaman Jhanjhi, Taylor's University, Malaysia Dr. Ritu Chauhan, Amity University, India Prof. Muhammad Saleem Khan, National College of Business Administration & Economics, Pakistan Dr. Abdullah Almasri, Hariot Watt University, Malaysia Dr. Osman Gulseven, Middle East Technical University, Turkey Mr. Shabib Aftab, Virtual University of Pakistan, Pakistan Dr. Areej Fatima, Lahore Garrison University, Pakistan

Dr. Tahir Alyas, Lahore Garrison University, Pakistan Dr. Umer Farooq, Lahore Garrison University, Pakistan Dr. Muhammad Abu Arqoub, Petra University, Jordan Dr. Ahmad Shubita, Petra University, Jordan Dr. Wael Hadi, Petra University, Jordan Dr. Nasreen Khan, SZABIST, UAE

# **EDITORIAL**

The editorial board of Int. J. TOP are pleased to introduce the first issue of the first volume to 2022 year of the "International Journal of Theory of Organization and Practice" (IJTOP). The Int. J. TOP is published by GAF-TIM, the Global Academic Forum on Technology, Innovation and Management.

International Journal of Theory of Organization and Practice (IJTOP) is a worldwide peer-reviewed journal dedicated to publishing in-depth studies that have a significant area of knowledge regarding organizational theory, practice and various fields. IJTOP is committed to expressing the contemporary theoretical and applied academic research in the area of innovation and technology to meet the demands of businesses today along with the application of those methods assisting organizations decision making. The IJTOP welcomes original contributions that are conceptual studies expand our grasp of the business theory. Its specific purposes are to promote a better understanding of innovative and digitized practices being held in organization and how business conduct can impact the practices in organizations. IJTOP combines an emphasis on business growth and affluence with advanced research and innovative ideas. IJTOP is expanding quickly in order to empower and occupy all academics and scholars from across the world and provide them with a reliable platform for sharing their innovative knowledge based research articles.

The inaugural of issue1, volume1, of IJTOP includes ten articles. In this issue, the opening with business intelligence and business process agility on achieving competitive advantage. Moreover, it discusses over critical success factors to improve the performance of service operations. More emphasis on dynamic capabilities and process improvement on process quality. Another stress given to inventory management and service strategy on service process improvement in hospitality sector. While highlighting information technology capabilities and effective inventory management on enhanced service delivery. On the other hand, a demonstration over lean practices and agile practices on process quality. Also, effective order management and use of information technology in service operations in enhancing service quality. Area of service strategy and service transparency on customer satisfaction has been discussed. Then service strategy and service quality on operations efficiency. Finally, impact of service transparency and service control on competitiveness has been discussed.

Int. J. TOP appreciates all the support that it is receiving from its members as well as from its readers.

# Editor(s)-in-Chief Prof. Haitham M. Alzoubi and Dr. Taher M. Ghazal

# THE IMPACT OF BUSINESS INTELLIGENCE AND BUSINESS PROCESS AGILITY ON ACHIEVING COMPETITIVE ADVANTAGE

Muhammad Turki Alshurideh<sup>1</sup>, Barween Al Kurdi<sup>2</sup>, Ali A. Alzoubi<sup>3</sup>, Ahmad AlHamad<sup>4</sup>

<sup>1</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>2</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>3</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

<sup>4</sup> Department of Management, College of Business, University of Sharjah, Sharjah 27272, United Arab Emirates. aalhamad@sharjah.ac.ae

# ABSTRACT

Modern businesses face new challenges as a result of the shifting environments in which they conduct organizational operations. These include the requirement for value creation in partnership with customers, preparedness for change, and the capacity to act quickly in response to consumer needs and to gain competitive advantage. Agile companies are seen as a new paradigm for businesses and are defined by these characteristics. This research aimed to seek the signified role of business intelligence and business process agility by attempting to create a conceptual model in order to dig more knowledge in this concept a literature based research carried to contribute in literature and academic source.

Keywords: Business Intelligence, Business Process Agility, Competitive Advantage.

# 1. INREODUCTION

A business must act quickly to maintain its competitive advantage in order to meet client demands in a market that is continuously shifting. In order to innovate in the manufacturing process and information and communication technologies, businesses must restructure their businesses and develop new marketing strategies [1], [2]. There are various characteristics of an agile manufacturing process are: ensuring the manufacturing process is quick and flexible; producing on demand as opposed to the conventional manufacturing method, which involves producing and storing vast amounts of commodities; addressing the individual demands of clients as opposed to mass producing products for the "typical" consumer [3], [4]. Whereas, the significance of business intelligence to gain competitive advantage cannot ignored. As per investigation of dashboards for business intelligence offer rapid access and turn unstructured data into meaningful, aesthetically pleasing representations [5]. They provide the clear display of organized and customized data for all employees [6]. In order to assess the impact of business intelligence and business process agility to gain competitive advantage a literature based research is conducted that will highlight contemporary findings for the academic source and business practitioners.

# 2. THEORETICAL FRAMEWORK

#### 2.1. Business Intelligence

The traditional business methodologies have been changing rapidly and thus organizations are rapidly advancing towards technological advancements and they are accepting other means of competitive edges [7], [8]. With the arrival of digitalization and other automation processes, the shift in business process management and business intelligence has been seen and that's why businesses have turned themselves to a new direction [9]–[12]. This literature review will explain the relation between business intelligence, agile technology and the competitive advantage of the organizations [13], [14].

[15] explained the significance of having business intelligence to improve serviceability in the organization [16]–[18]. As it has become apparent for the organizations to retain their market shares, the only feasible solution is to have a concrete competitive edge [19], [20]. Data analysis and interpretation is the need of time because the amount of data which the companies are using is enormous [21], [22]. As the digitalization has taken over the world by a storm, companies are relying heavily on the data sets [23]–[25]. In the process of business intelligence, companies have to understand the data sets and patterns and thus they can make the meaningful decisions then [26]–[28]. As the times are changing, companies are shifting their focus on digital presence and thus a lot of companies exist digitally [29]–[31]. Take the example of Uber [32], [33]. It's an internet ride hailing platform which allows people to call a cab at their doorstep. Now Uber does

not own any cars or employees but it simply exists digitally and that's why understanding the data sets is very important for Uber [34]. Furthermore, consider the example of Amazon [35]. The company is the biggest online retailer in the world and thus all of its operations exist digitally. People just have to sit at homes and make the online orders and the company delivers the products at homes [36]–[38]. Or consider online banking. After the outbreak of corona virus around the globe, people have chosen online banking over physical banking and that's why the data sets in the banking industry has taken a huge importance because bankers have to understand the data and make the meaningful decisions [39], [40].

#### 2.2. Business Intelligence and Business Process Agility

[41] evaluated Business process agility helps organizations to attain competitive advantage. The business markets are changing and that's why companies have been adopting new measures of businesses and technological advancements [42], [43]. It has become important for companies to adopt the new processes and to eliminate the older ones [44]. This is known as business process agility because the organization has to gel itself according to the changes in the internal and external environment. Consider the example of local traditional banking systems and practices [45], [46]. As the times changed, the banks had to shift their services to digital platforms because they knew the likes and practices of people were changing and that's why the banks had to adopt the new technological advancements [47]. This enabled the banks to become one of the top services providers in the market [48]–[50]. Or consider the example of ride hailing services [51], [52]. The companies realized that since the movements of people were confined to their homes, they did not want to travel to roads and find a cab. For this reason, the ride hailing services found a pain point and thus they shifted their trends [53]–[55]. But all of this would not have been possible without the help of business intelligence because the data analysis and patterns were the sole reason of business process agility [56]. The companies started to study the trends and patterns and thus they understood the customers' psyche and their preferences [57], [58]. For this reason, the companies were easily able to implement their new decisions and strategies. Consider the example of Netflix [59]–[61]. It knew that the customers' trends were shifting and their focus was changing rapidly from downloadable movies because they were time consuming so Netflix studied the patterns and understood the pain point of the people and thus it was able to come up with a new idea [62]–[64]. But this would not have been possible had the Netflix owner not studied the customer behavior and its patterns and would not have come to the conclusion [65]-[67]. This allowed the

management of Netflix to understand what people needed exactly because the business intelligence systems had allowed the companies to read the patterns in detail [68]. The patterns and the raw data were converted into meaningful forms and thus it was easy to arrive at a conclusion [52], [69]–[71]. For this reason, a lot of companies have adopted the business intelligence methods to keep them updated and to implement the business process agility [72], [73]. As the organizations have to change themselves according the trends, it's important to understand the patterns [74]–[76]. As the customers' demands are always changing, the companies need to quickly respond to them so that customers can be retained and the churn rate does not increase with time.

#### 2.3. Business Process Agility and Competitive Advantage

[77] gauged Business process agility and the firm's competitive edge have a direct relation because when there is a business process agility, the firm gains a competitive advantage in the market and thus it is able to easily beat its competitors [78]–[80]. As the times are changing, the customers' demands and preferences are also changing and that's why businesses need to change themselves according to the situation [71], [81]. Take the example of Nokia. The concept of business process agility was not there when Apple and Samsung entered the markets and thus it could retain its competitive edge in the market and that's why it badly lost the competition in the market against the technological giants in the shape of Apple and Samsung [82], [83]. This allowed the two companies to rule the world and thus they kicked Nokia out of the market [84], [85]. There was a time when Nokia was the market leader and its products were sold everywhere in the world and that's why the Finnish giant had developed its brand image and reputation [86], [87]. But with the passage of time, things changed and thus Nokia lost its reputation and image in the market [88], [89]. The sole reason was that Nokia did not go for business process agility. It did not understand that people's demands were changing and they were asking for new things [90], [91]. Apple and Samsung understood the market and thus they achieved a competitive edge in the market [92]-[95]. And today both these technological giants are ruling the global markets. This has led us to the belief that business process agility is the need of time and that's why people must have to adopt the changing market trends [96], [97]. If they are unable to accept or adopt the new trends, they remain far behind in the competition and often get eliminated too [98]–[100]. For this reason, a lot of companies hire financial experts as well to study the technological advancements in the world and to suggest them suitable solutions [101].

This has become the trends because organizations do not to lose their customers in the market and they have to retain them but to retain the customers, they have to change their policies and strategies with time [102]–[104]. As the times are changing, the competition in the business world is getting rigid and thus a lot of companies are going extinct [105]. Change management is necessary and thus a research was carried out at London School of Economics about the correlation between business process agility and competitive advantage [106]–[108]. The authors reached to the conclusion that both these variables have a direct relation with each other because if the organization understands the concept of business process agility, it retains its competitive edge "because it changes the entire strategies and its operations according to the changing market trends and that's why the market share is retained [109]–[112]. For companies, one of the biggest turning points is the loss of revenues and ultimately profits [111], [113]. They do not want this to happen and that's why they prefer to retain their market share and competitive edge [114], [115].

#### 3. LITERATURE REVIEW

#### 3.1. Impact of Business Intelligence and Business process Agility on Competitive Advantage

[39] explained that Business intelligence, business process agility and competitive edge play a very crucial role for the organizations [116], [117]. This is because of the reason that since the competitions in the markets are rigid, companies need to mold their functions according to the trends and patterns set [15], [118]. This allows them to retain their competitive edge and the market share. Businesses have a competitive advantage in the market because business intelligence enables them to respond to important inquiries about their performance. Your business can gain from investing in business intelligence in a variety of ways [119]–[123]. In this regard it has investigated by [124] employees have access to extremely accurate report templates using business intelligence tools, which may save them a ton of time [125], [126]. Business reporting and other documented work can be signified in digital forms and software that can be consolidated into a single, easily readable data dashboard, making it simple to scan the reports and identify areas that require improvement. This implies that a company can stay on top of issues and stay in the lead [127], [128]. By combining data sources, business intelligence software can help your organisation [129], [130]. Business intelligence giving your organisation a competitive edge involves identifying market trends and developing a strategy around them [131]. Employees can quickly

generate analyses and obtain pertinent market data with the aid of business intelligence tools [132], [133]. Whereas, Agile production is a new model of production that connects production, information technology, and communication advances through fundamental organizational reform and new marketing strategies. An organization's capacity to react quickly to shifts in demand, both in terms of volume and variety [134]–[136]. The capacity of a company to prosper in a dynamic, unpredictable business environment and the capacity to deal with unforeseen difficulties, endure exceptional risks from the business environment, and seize possibilities presented by change [137]. Ability of a company to obtain a competitive edge by quickly, rationally, and pro-actively grabbing

opportunities and responding to threats [138].

# 3.1. General Research Model



Figure 1: Conceptual Research Model

# 4. **DISCUSSION**

The deep study of literature, journals and books it can be said the business intelligence has allowed the companies to implement the data analysis techniques so that huge data sets could be easily understood. There are different types of software which help companies understand the data sets and patterns. Since data is everything, it should be converted into meaningful form because large data sets do not have any importance until and unless it has been converted into meaningful form. This has enabled many organizations to make powerful decisions and thus business intelligence has a direct relation with the competitive advantage. If the more is efficient enough in its business intelligence processes, it will have attain a competitive edge in the organization which will help it grow and be more productive. The significance of business intelligence has potential to grow business competitive edge, however, business agility is recommended as most appropriate practice for a firm's success. This is a very useful strategy for the companies around the world and thus it has enabled a lot of organizations to penetrate the markets because they understood the market conditions and customers' demand and that's why it was easy for them to arrive at a conclusion and implement a new strategy.

# 5. CONCLUSION

Business intelligence is emphasized as a crucial competitive tool in the strategic management. However, nothing is known about the long-term viability of the firms' competitive advantage brought forth by business intelligence competence. It can be said that, business intelligence and process agility has a significant impact on competitive advantage. Successful agility and business intelligence efforts can be implemented by organizations that follow solid governance and receive strong moral and financial support from high management.

# REFERENCES

- [1] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [2] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [3] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [4] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi:

10.32604/iasc.2021.017920.

- [5] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.
- [6] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [7] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [8] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, pp. 1–19, Sep. 2021, doi: 10.1155/2021/6262194.
- [9] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [10] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Dehost-live.
- [12] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [13] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [14] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [15] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [16] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery? Empirical Evidence from E- Commerce Industry," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 14–41, Dec. 2021, doi: 10.54489/IJTIM.V1I2.26.
- [17] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial

intelligence: A case study," Int. J. Bus. Innov. Res., vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.

- [18] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [19] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [20] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [21] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.
- [22] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [23] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [24] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.
- [25] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [26] H. Alzoubi, M. Alshurideh, B. Al Kurdi, and M. Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 579– 588, 2020, doi: 10.5267/j.uscm.2020.2.005.
- [27] M. Alshurideh, R. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 12, pp. 69–78, 2012.
- [28] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [29] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 42–63, Dec. 2021, doi: 10.54489/IJTIM.V1I2.17.
- [30] M. T. Alshurideh *et al.*, "Factors affecting the use of smart mobile examination platforms by universities' postgraduate students during the COVID 19 pandemic: an empirical study," in *Informatics*, 2021, vol. 8, no. 2, p. 32.
- [31] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of

e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. *E-Learning Knowl. Soc.*, vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.

- [32] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [33] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [34] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/j.uscm.2021.11.006.
- [35] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [36] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [37] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [38] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [39] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [40] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [41] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [42] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [43] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [44] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.

- [45] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [46] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [47] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [48] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [49] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [50] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [51] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [52] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [53] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [54] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [55] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [56] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [57] H. M. Alzoubi et al., "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [58] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management:

Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.

- [59] B. Al Kurdi, M. Alshurideh, and T. Al afaishat, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020, doi: 10.5267/j.msl.2020.7.011.
- [60] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [61] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [62] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [63] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [64] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [65] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [66] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [67] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [68] T. M. Ghazal et al., "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [69] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [70] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [71] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [72] Y. Ramakrishna and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag.*, vol. 15, no. 1, pp. 122–135, 2022, doi: 10.31387/OSCM0480335.

41, 2020, doi: 10.3991/ijim.v14i02.11115.

[73]

- B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19–
- [74] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [75] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [76] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [77] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.
- [78] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [79] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [80] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [81] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [82] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," Int. J. Appl. Inf. Syst., vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [83] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [84] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [85] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.

- [86] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [87] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [88] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [89] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [90] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [91] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [92] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 11, no. 1, pp. 67–78, 2022, doi: 10.1177/23197145211042232.
- [93] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [94] B. Al Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, pp. 6484–6496, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [95] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [96] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [97] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [98] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.

- [99] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [100] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [101] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [102] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429– 438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [103] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V2I1.75.
- [104] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [105] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [106] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [107] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [108] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [109] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020, Accessed: Sep. 15, 2022. [Online]. Available: www.ijstr.org.
- [110] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [111] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [112] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020,

[Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.

- [113] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [114] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.
- [115] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," 2021, pp. 235–247.
- [116] B. Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. AlHamad, and H. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022.
- [117] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [118] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [119] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020.
- [120] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [121] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [122] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [123] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [124] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [125] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.
- [126] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.

- [127] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [128] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [129] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [130] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [131] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [132] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [133] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.
- [134] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 1–17, 2022.
- [135] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [136] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [137] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [138] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.

# CRITICAL SUCCESS FACTORS TO IMPROVE THE PERFORMANCE OF SERVICE OPERATIONS

Barween Al Kurdi<sup>1</sup>, Muhammad Turki Alshurideh<sup>2</sup>, Samer Hamadneh<sup>3</sup>, Hevron Alshurideh<sup>4</sup>

<sup>1</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>2</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>3</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

<sup>3</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan. Orcid [0000-0003-2037-1813],.s.hamadneh@ju.edu.jo

<sup>4</sup> Department of Foreign Languages, Faculty of English Language and Literature, The University of Jordan, Amman 11942, Jordan, Hevronalshurideh@gmail.com

#### ABSTRACT

It is a big controversy that holds up an organizational operations and development to focus on critical success factors. Critical success factors are as important and straightforward as they appear to be. They are the elements that make up a business or project and are crucial to its success and aid in concentration and make sure that teams and departments are collaborated on organizational projects. In order to find the specific improving factors for an organization, this research is focused to investigate, what are that critical factors to improve operations performance to bring wide knowledge for businesses and learners.

Keywords: Critical Success Factors, Service operations Performance.

# 1. INTRODUCTION

Despite the dangers of globalization, businesses strive to gain competitive advantages. Due to the high standards for proficiency, the majority of businesses aim for increased profitability. It is expected of employees to perform fairly and to develop their skills [1], [2]. As a result, the effectiveness of organizations is evaluated based on how their organizational planning is developed [3]. Implementing human resource management methods and fostering individual development to become assets of an organization are essential due to the fact that human resources are one of the most significant assets of a business [4]. Thus, implementing solid success factors can enhance the organizational performance and growth in the market. [5]–[7] asserts success approaches result in beneficial consequences including highly competent, highly adaptable, and highly devoted staff employees who can enhance organizational performance. With a subject to this concern a theory based research is formed that will help to figure out specific critical success factors to improve service operations performance.

# 2. THEORETICAL MFRAMEWORK

### 2.1. Critical Success Factors

Some factors affect service operations' performance; these critical success factors are also known as Key Results Areas used in a business or a project to get a successful outcome [8]–[10]. Besides, the critical success factors are also vital to good communication between the organization to ensure that they have entirely focused on its aim and objectives.

To know more about the Critical Success Factors, there are five key elements are:

- The first one is the Strategic Focus, which is containing Leadership, Management, and Planning [11], [12].
- The other belongs to People and has different areas of Personnel, Staff, Learning, and Development factors [13].
- To get sustainable growth, the operations factor is playing a vital role in business success. Those are including processes and work [14].
- The most important and common factor in critical success is Marketing, giving full control of customer relations, Sales, and responsiveness [15].
- Last but not least is the organization's finances having different components of Assets, Facilities, and Equipment?

To know more about the Critical Success Factors, four significant types of CSFs are coming in an organization as per the below categories:

2.1.1. *Industry Factors:* The first one belongs to the industry and has the same characteristics and will remain in the sector's competitive advantages [16], [17].

2.1.2. *Environmental Factors:* The factors that are affecting by macro-environmental influences are known as environmental factors. Those factors are business climate, PESTEL analysis, competitors, technological development, and the economic factor.

2.1.3. *Strategic Factors:* The other factors that are helping in business success are specific competitive advantages. Those factors can be high in volume or low in volume depend upon the organization's position and market reputation [18], [19].

2.1.4. *Temporal Factors:* explained temporal factors are short and are depending upon the organization's internal changes, like temporary barriers, challenges, and directions.

There are six significant steps are involved that are helping to identify and developing the Critical Success Factors for the organization [20], [21].

# 2.2. The six CSFs are discussing below

To make an effective organization's mission and its strategic goals.

To make strategical success goals, it is better to ask how to succeed in the business and project activity [22]–[24].

Evaluate the list of candidates that need to apply carefully to achieve Critical Success Factors [25].

To know how these critical success factors are working and monitoring the goals and objectives.

Critical Success Factors need to make reliable delivery for the success of a business [26], [27].

There should properly maintain the KPIs to know the performance of a business.

# 3. LITERATURE REVIEW

[28] explained that some factors affect service operations' performance; these critical success factors are also known as Key Results Areas used in a business or a project to get a successful outcome. Besides, the critical success factors are also vital to good communication between the organization to ensure that they have entirely focused on its aim and objectives. Below are the key

factors that are the critical success factors that are helping to improve the performance of service operations:

# 3.1. Up-to-Date Products

[29], [30] explained that to be successful and improve the service operations, it is better to keep the products and their offers up to date to ensure that they are giving all the details per the customers' requirements and according to their expectations [31]–[34]. It is very challenging for the organization to meet requirements, expectations, and competition level with a high level of advanced and innovative technology use, which helps generate more lead and improve operational activities [35], [36]. Suppose a company is seeing the decline of the product cycles and the industry segments [37]. Due to a lack of focus on the product segmentation and details that should upgrade time to time and meet customer expectations [38], [39]. To make it a successful business, it is vital to update all the product details and customer expectations [35], [40].

[41] explained it is essential to analyze the market to know about the product trend and minimize the risk of launching new products but would be very careful to satisfy the customer needs and wants; otherwise, it will affect the business's performance and operational activities [42]–[45]. There are some ways to do market research like market analyses, customer surveys, focus groups, and competitive business intelligence.

# 3.2. Value-Added Services

[46] examined the most effective way to increase the business's performance level is through the involvement of value-added services. Sometimes, it is tough to sell existing products or services that ultimately impact performance and operations [47]. The best way to improve them by added value to the existing products or services [48]–[50]. It could be like adding some new features in the products or improving the high-tech services by giving technical support, customization, and different applications training.

[51], [52]stated that once the perfect value-added services implementing in the services or products with the customers' specific needs and demands, it will increase the business's revenues and profits with those services and products [53], [54]. The best implementation of the value-added services enhancing the performance level and giving proper direction towards success [55], [56]. It is also essential to have in-depth knowledge about the organizational structure, technical applications,

and products' usage [57], [58]. If all the things are appropriately applied, it will be beneficial for the organization to succeed and improve business operations.

#### 3.3. Business Processes

[59] explained to successfully convey the items, administrations, and arrangements that our clients need, we likewise need to guarantee that the business measures we use are fitting, exceptional and take care of business [60], [61]. If they are not, we have to transform them into our clients' desires without making an excessively exorbitant arrangement that disposes our net revenues [62]–[65]. In evaluating business measures, it is necessary to comprehend that selling items is essentially not quite the same as selling administrations and arrangements along these lines requiring various methodologies, cycles, and abilities [66], [67]. As administration and backing contributions keep on being improved to furnish clients with more complete arrangements, the cycles required additionally proceed to change and require extraordinary and more complex aptitudes and apparatuses themselves [68], [69]. Administrations experts need to incorporate the blend because of the ideal arrangements' multifaceted nature [70]–[72].

# 3.4. Responsibility

As arrangements and cycles become included, it also becomes more probable that various individuals get included at various stages end route [73]. Although innovation can help deal with this somewhat, there is as yet a considerable danger that something may turn out badly or may fall "between the breaks [74]." To stay away from these potential outcomes requires an alternate methodology and - all the more significantly - an alternate mentality [75]–[77]. The presence of any "not my work" disposition among existing staff would destroy in this sort of climate. To get an opportunity for progress requires cooperation, responsibility, and finish. The association should ensure that it plans the business cycles to consider direct responsibility and arrange the robotization frameworks [78]–[82]. A few organizations have effectively actualized collaborations and responsibility, profound inside the association utilizing record groups devoted to "dealing with the client" versus just "dealing with the issue." Our experience to execute this takes much time and requires explicit preparation in various abilities, group construction, and impacting individuals' mentalities [83].

# 3.5. Client Focused Front-Line Organization

Since the client should consistently be the organization's principal center, we have to ensure that the association is suitable for this core interest [84], [85]. How they communicate with clients will eventually decide the clients' view of the association overall [86]. The abilities must cover the specialized parts of client assistance and the correspondences and relational aptitudes that let clients realize that they are being thought about appropriately [87], [88].

# 3.6. Adaptable and Responsive Back-End Organization

This association needs to help its cutting-edge faculty by advancing the instruments and techniques that empower the correct execution of the necessary assignments [58], [89]. It incorporates the conventional documentation of the innovation used, the guidelines and direction for applying it, the advancement of selling and upkeep instruments, and, to wrap things up, a particular arrangement of acceleration methods [90], [91].

The back-end association is liable for setting the stage and making a foundation that permits the forefront association to play out its assignments without issue or obstruction [92], [93]. Capacities in this section of the association may incorporate deals backing and organization, specialized and item backing, preparing, and coordinating capacities. Although these capacities are regularly more inner and item engaged, they are significant components influencing client recognitions [94]–[97]. In numerous associations, we have seen an absence of a desire to move quickly and responsiveness in the back-end association that eventually influences the bleeding edge association's capacity to give clients the degrees of execution they require.

# 3.7. Innovation Trends

Innovation is one of the critical components of change. It can give us the majority of the instruments we have to improve our business execution and lower the association's operational expenses [98], [99]. As a whole, we know the mobilizing call to "accomplish more with less," and much of the time, innovation, whenever applied accurately, is the chief apparatus that will permit us to do as such. In any case, the genuine test is to figure out what is sensibly accessible and how we can use it as an advantage [90], [100]–[102]. We have all observed the publicity in different articles and notices that advances "new" innovation items. However, we need to understand that a portion of these "new" advances, regardless of the guarantee, are not yet adult - or accessible [103].

For instance, promotions like "would you be able to hear me presently" unmistakably show that we have remote inclusion issues [104], [105]. As needs are, if correspondence and data stream exclusively on remote innovation, it very well may be in for certain astonishments. This situation does not imply that we ought not to examine this innovation further and continue pursuing this heading. The potential is there [106], [107].

### 3.8. Apply the Right Technology

The accessibility and expansion of innovation arrangements can be too confounding and, at times, in any event, misleading. The well-known proverb that "you never ought to apply innovation for innovation purpose" is as yet real. Consequently, it will, in any case, need to painstakingly examine elective innovations, just as their applications to exact circumstances [108], [109]. The ideal approach to do this is to plan business cycles and structure around the most reasonable innovation arrangements and spotlight those that will help accomplish business destinations [110], [111]. If the organization does not do this, the arrangements can turn out to be over the top expensive, notwithstanding descending value patterns, bringing about insignificant speculation returns [112], [113]. We prescribe evaluating the technical necessities to help business measures from both an operational and utilitarian point of view yet determined essentially for the business goals. Innovation should be how it might achieve business objectives, yet not the essential goal [114], [115]. It must understand that not all innovation will give the advantages the organization is hoping to pick up - it is only a device to help meet generally speaking business targets.

#### 3.9. Oversee Continuous Change

This last factor may be the main one: overseeing and controlling the constant change measure. We have seen numerous organizations create and send exceptionally productive change activities, yet considerably more have transformed into fiascos or are relinquished part of the way through the execution [116]. From our experience, senior administration should consistently have an away form of things from the organization [117]–[119]. It requires future speculation, upheld by statistical surveying and client overviews, to convert into a good vision and system. When the vision and system implement, an evaluation can decide a benchmark for change, and an arrangement can create to get it going [120], [121]. The holes and openings distinguished for executing change should recognize for the entirety of the association's items and administrations

and the business cycles, association, and apparatuses (i.e., innovation) that will enable it to roll out the vital improvements. Because of this evaluation, an item and administration improvement plan can plan and execute. The current business cycles can be adjusted to meet the new necessities [5], [122].

# 3.10. Steps to make the Key Progress Factors

The organization should know that it is fundamental to arrange the group working with the CSFs; it is essential to have representatives present their thoughts or input. Always remember to have numerous systems to look at the critical components of drawn-out objectives [123]–[125]. Before executing a broad essential arrangement considering fundamental achievement factors, figure out which components are vital in accomplishing a drawn-out authoritative arrangement.

• Abilities

The leadership should be prepared and arranged to place the organization in the line of accomplishment. A portion of the abilities that can be scholarly are monetary administration, promoting deals, and client care, correspondence, and exchange venture the executives and arranging, authority, critical thinking, and, ultimately—however, one of the primary aptitudes, organizing [12], [126], [127].

• Correspondence

The organization needs to assemble all the staff, offering thoughts about what could be smarter to accomplish their objective. The organization needs to focus on two parts of the correspondence cycle: The Initial Launch Communications, which will set the arrangement to accomplish, and the Ongoing Communications, which will be where the KSF progress [128], [129].

• Arranging

To utilize the CSFs, all that should arrange, how workers will do it, and why. Apparatuses can utilize to make arranging work quicker and simpler. A system for every office can arrange independently[130].

• Collaboration

Decent cooperation is the way to progress when all the staff team up; more thoughts and sentiments can discuss to locate an ideal approach to making progress [131]–[133].

• Cycle

A business cycle or business technique is an assortment of related, organized exercises or undertakings by individuals or gear which, in a particular succession, produce a help or item (serves a specific business objective) for a specific client or clients [134]–[136]. Business measures happen at all authoritative levels and could conceivably be evident to the clients. A business cycle may regularly picture (demonstrated) as a flowchart of an arrangement of exercises with interleaving choice focuses or as a cycle grid of a succession of exercises with pertinence rules dependent on information all the while [137]–[139]. The advantages of utilizing business measures incorporate improved consumer loyalty and improved deftness for responding to quick market change.

#### 3.1. General Research Model



Figure 1: Conceptual Research Model

# 4. **DISCUSSION**

The way to get success in the operational field is to give an integrational solution for the product or services that may issue faced by the customers. The business needs to know about the customer demands and keep them in mind and give them the best solutions if the product is not working correctly and not performing up to the mark. One of the most vital client necessities that must address in the business measures is the time factor. However, innovation can answer this issue through far off diagnostics and electronic self-uphold, conceivable, without burning up all available resources - for either the client or the specialist co-op. Notwithstanding, addressing this need by and large requires some essential client research, inward cycle evaluation, and, potentially, a central re-plan of the current business cycles and devices utilized, molding the client, arrangement preparing, and a correspondence structure that takes into account ongoing acceleration. It is particularly valid for an association on the move (i.e., in development mode, late combined, fire up, saving. Our experience is that most workforce can generally utilize some extra preparation to point their current abilities and make them more mindful of the particular "do's and don'ts" of client cooperation. By doing this viably, the association may concentrate the entirety of the client's vital consideration, accordingly, altogether expanding its prosperity possibilities.

# 5. COCLUSION

To keep a business or project focused on what needs to be done to succeed, it is essential to recognize and communicate critical success factors within an organization. Additionally, it might assist in avoiding wasting time and resources on less significant aspects of the company's operational practices. These factors enables an organization management to review the strategy, values, and mission. Identify the organizational goals and track and evaluate the organizational development.

# REFERENCES

- M. M. El Khatib *et al.*, "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [2] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," *Int. J. Technol. Innov. Manag. (IJTIM), 2*(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [3] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [4] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [5] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [6] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 18–

32, 2022.

- [7] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [8] T. M. Ghazal *et al.*, "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [9] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [10] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [11] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [12] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [13] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [14] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [15] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [16] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 1–17, 2022.
- T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [18] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.
- [19] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.

- [20] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [21] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [22] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [23] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [24] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [25] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [26] H. Alzoubi, M. Alshurideh, B. Al Kurdi, and M. Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 579– 588, 2020, doi: 10.5267/j.uscm.2020.2.005.
- [27] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V2I1.75.
- [28] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [29] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [30] T. M. Ghazal *et al.*, "Hep-Pred: Hepatitis C staging prediction using fine gaussian SVM," *Comput Mater Contin.*, vol. 69, pp. 191–203, 2021.
- [31] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [32] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [33] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.

- [34] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [35] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.
- [36] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," 2021, pp. 235–247.
- [37] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [38] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, vol. 4, no. 2, pp. 1–15, 2020, doi: 10.1080/10494820.2020.1826982.
- [39] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [40] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [41] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020, Accessed: Sep. 15, 2022. [Online]. Available: www.ijstr.org.
- [42] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [43] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [44] B. Al Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, pp. 6484–6496, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [45] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [46] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and

Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," *ENLIGHTENING Tour. A PATHMAKING J.*, vol. 11, no. 1, pp. 102–135, 2021.

- [47] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [48] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [49] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [50] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [51] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [52] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [53] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [54] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [55] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [56] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [57] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [58] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 42–63, Dec. 2021, doi: 10.54489/IJTIM.V1I2.17.

- [59] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [60] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [61] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [62] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [63] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [64] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [65] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [66] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [67] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [68] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [69] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [70] B. Al Kurdi, M. Alshurideh, and T. Al afaishat, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020, doi: 10.5267/j.msl.2020.7.011.
- [71] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [72] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using
blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.

- [73] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [74] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [75] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [76] M. Alshurideh, B. Al Kurdi, A. Vij, Z. Obiedat, and A. Naser, "Marketing ethics and relationship marketing-An empirical study that measure the effect of ethics practices application on maintaining relationships with customers," *Int. Bus. Res.*, vol. 9, no. 9, pp. 78–90, 2016.
- [77] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [78] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [79] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [80] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [81] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [82] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [83] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [84] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [85] M. F. Khan et al., "An iomt-enabled smart healthcare model to monitor elderly people using

machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.

- [86] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [87] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [88] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.
- [89] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [90] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [91] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [92] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429– 438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [93] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [94] H. A. Shamout, Rabeb Ben-Abdallah, Muhammad Alshurideh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022.
- [95] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery? Empirical Evidence from E- Commerce Industry," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 14–41, Dec. 2021, doi: 10.54489/IJTIM.V112.26.
- [96] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [97] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [98] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," Int. J.

Technol. Innov. Manag., vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.

- [99] M. Alshurideh, R. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 12, pp. 69–78, 2012.
- [100] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [101] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [102] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, pp. 1–19, Sep. 2021, doi: 10.1155/2021/6262194.
- [103] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [104] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [105] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [106] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [107] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [108] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [109] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- [110] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.

- [111] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [112] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [113] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [114] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. Alhamad, and H. M. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022, doi: 10.5267/j.ijdns.2022.7.006.
- [115] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [116] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [117] Y. Ramakrishna and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag.*, vol. 15, no. 1, pp. 122–135, 2022, doi: 10.31387/OSCM0480335.
- [118] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [119] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [120] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [121] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [122] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [123] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.

- [124] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [125] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [126] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [127] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [128] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redibw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN %3D151548527%26site%3Dehost-live.
- [129] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [130] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [131] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 11, no. 1, pp. 67–78, 2022, doi: 10.1177/23197145211042232.
- [132] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [133] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [134] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.
- [135] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi:

- [136] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [137] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [138] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [139] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.

## IMPACT OF DYNAMIC CAPABILITIES AND PROCESS IMPROVEMENT ON PROCESS QUALITY

Wasfi, A. Alrawabdeh<sup>1</sup>, Muhammad Turki Alshurideh<sup>2</sup>, Barween Al Kurdi<sup>3</sup>

<sup>1</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-1172-7622-4617], rawabdeh@hu.edu.jo

<sup>2</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>3</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

## ABSTRACT

In Organization environment, Process quality management is latest way therefore, adoption of such Process Quality Management approaches may bring challenges and problems particularly when implementing. Now a days it is easy to solve the problems regarding Process Quality Management issues as many organizations are documenting their process quality experiences on local media. Similarly, Organization management also had to face the challenges in this approach. In this regard, a research is established to explore the impacts of these approaches. *Keywords: Dynamic Capabilities, Process Improvement, Process Quality.* 

## 1. INTRODUCTION

Organizations are now required to use unconventional management approaches and technologies due to a major increase in the level of business competition (Hanaysha et al., 2022; Kashif et al., 2021). The chore of maintaining a competitive advantage is dynamic and endless. Researchers have suggested that firms should have skills for enhancing company core processes and ongoing learning in order to sustain competitive advantage and maintain the quality (M. Alshurideh et al.,

2020). Moreover, process improvement management approach in companies are formed in very unique way (Alshurideh et al., 2021; Zeeshan Zafar et al., 2022). It provides an aim to the firm in order to move forward and establish their process according to customer needs and demands (Eli, 2021; Taher M. Ghazal et al., 2021d; Khatib et al., 2022c). Hence, improving the profitability of the firm and at the same time overall development (Akhtar et al., 2021; Tellez et al., 2022). Therefore, finding connections between dynamic capabilities and process improvement and their impact on process quality is a main goal of this research. In order to properly study dynamic capability as an emergent notion, one must take into account both its causes and effects on process quality accordance with prior literature, research studies, journals and books. They can help to investigate the supplementary impacting factors in the organization.

## 2. LITERATURE REVIEW

## 2.1. Impact of Dynamic capabilities on process improvement

Dynamic capabilities involve two element resources and strategies and process improvement is the enhancement of company processes through different strategies (Alsharari, 2021; Ghazal et al., 2013; Khatib et al., 2022f; Ramakrishna and Alzoubi, 2022). Therefore there is direct impact on of dynamic capabilities on process improvement because the resources are the one who carry out the strategies in order to attain process improvement (Mehmood, 2021). Although core business process framework is suffice the core needs of business services but impairment suggestion are required to further enhance them.

- Firstly, the core business process is revolving around customer centered approach rather than service centered approach. The core business process of company strategy starts from customer needs and ends at getting paid by them (M. A. M. Afifi et al., 2020; El Khatib et al., 2021c). This should be more service centered such as working with efficient delivery time, providing services choices, delivery alternatives etc (B. A. Kurdi et al., 2020; Miller, 2021).
- Secondly, there should be level 6: Reassessment in BPM 5 level assessment frame work as reassessment is highly required for companies upgrading business processes.

Today, PQM approach is considered very vital. Most clients focus on quality rather than price as quality value the money spent (H. M. Alzoubi et al., 2022e; Khan, 2021; Mondol, 2021). In

today's world, satisfaction of consumer is not an easy job and Organization is completely aware of this new trend (Alshurideh et al., 2017). Organization is of the view that main element in order to achieve success and beat the competition in modern market is quality. This is why companies all over the world are focusing mainly on quality management issues and use it as tool to overcome the competition (Abu Zayyad et al., 2020; El Khatib and Ahmed, 2020). Process Quality management is a newly emerged field and is in developing stage of its evolution (Alshurideh et al., 2019; H. M. Alzoubi et al., 2022a; Guergov and Radwan, 2021; B. Al Kurdi et al., 2020).

Companies had successfully formed their own methods of Process improvement and monitoring which is upgraded with the requirement of time and demand (Al Kurdi et al., 2020; Khatib and Opulencia, 2015). This procedure of improving process could never be discontinued in order to satisfy the customers as process is considered as the backbone of the product or service offered (Alzoubi, 2021; Taher M Ghazal et al., 2021a). This is the reason Process improvement management is considered as very significant for companies over past recent decades (H. M. Alzoubi et al., 2022c; El Khatib, 2015). An ongoing process of improvement in the services should exist in order to identify the proper advantages of Process Improvement (Farouk, 2021; B. Kurdi et al., 2020). One more thing that companies should believe in that, company products and services are not dependent wholly on process improvement but other elements of dynamic capabilities also in order to satisfy the consumers and to attain its aim (Alshurideh et al., 2012; El Khatib et al., 2019b). Process Improvement only required assisting the issues that are related to customer satisfaction (Al Batayneh et al., 2021; H.M. Alzoubi et al., 2021; Obaid, 2021).

In the beginning, companies have to encounters various challenges and hurdles in implementing and adopting latest process improvement management system due to its ongoing process nature (Taher M. Ghazal et al., 2021c; Khatib et al., 2016; B. Al Kurdi et al., 2022b; Vorobeva Victoria, 2022). But later, companies found the changing trends in economic condition of the world market. Therefore, to provide its business a new and vast direction as a customer-oriented business it adopted Process improvement approach (Eli and Lalla Aisha Sidi Hamou, 2022).

#### 2.2. Impact of Dynamic Capabilities on Process quality

As we know that Dynamic capabilities involve two element i.e. Resources and strategies. Therefore the impact of dynamic capabilities of an organization have direct impact on process quality management as the process quality could be achieved only applying through different strategies by resources of the company (M. Afifi et al., 2020; Alshurideh et al., 2018; El Khatib and Ahmed, 2019; B. Al Kurdi et al., 2022a). At each stage of this enhancement of business process model, we can observe a team leader managing team members all of which can directly affect the commitment. The model supported leadership as it generated a sense of objective for the company and a visual link for everyone to see how they are connected to the customer (Amponsah et al., 2018; El Khatib et al., 2020b; Hammad et al., 2022; Qasaimeh and Jaradeh, 2022).

Commitment aspect however was noticed little weak at providing training programs as trainings were scheduled at short notice thus everyone was not able to attend them and at depot management as they did not understand the commitment required afterwards to monitor and sustain the changes (M. T. Alshurideh et al., 2022; John Kasem and Anwar Al-Gasaymeh, 2022). Therefore looking at the leadership and commitment aspects we created a route map for implementing BPM.



What role can innovation play in the introduction and development of BPM methods used in companies in other industries or organizations in the public sector?

Innovation can play a significant role in the introducing and development of BPM methods utilized in companies such as

- Introducing new processes
- Changing old processes

43

- Creating new ideas
- Creating workflows
- Creating methodologies
- Creating services alternatives

## 2.2.1. Organization Adoption of Process Quality Management Approach:

Process Quality Management Approach is adopted by Organization with a department wise strategy (Ahmed and Nabeel Al Amiri, 2022; M. El Khatib et al., 2021; B. Al Kurdi et al., 2022a). As it is an ongoing and extensive process, therefore department of Organization were presented with PQM approach in a hierarchical method

• PQM at Organization Internet Service Provider

Internet provider services department at Organization was the first one to adopt the system of Process Quality management (Alsharari, 2022; Alzoubi, 2022; T M Ghazal et al., 2021; E. Khatib et al., 2021). They observe positive changes after implementing it in the form of increase number of communication, customer attraction and improved brand image (El Khatib and Ahmed, 2018; B. Kurdi et al., 2022).

• PQM at Organization Mobile Service provider

Organization Mobile Service provider was the second department of Organization to adopt Process Quality Approach after Internet Service provider department. They received the benefit in the form of improved and enhanced quality of equipment that are utilized to deliver the services to customers (Alhamad et al., 2022; Edward Probir Mondol, 2022; El Khatib and Al Falasi, 2021)

• PQM at Organization Marketing Department

Process Quality Management approach was also applied to Marketing strategies (H. Alzoubi et al., 2022; El Khatib et al., 2021b; Nada Ratkovic, 2022). Before this approach the mission was to deliver the services and product with lowest possible price but now the quality mission is to deliver the services and products with best quality with possible low cost (El Khatib et al., 2021a).

• PQM at Organization Training

Process Quality management approach main element and tool is to provide proper and adequate training to the Organization employees (Ahmed and Rafiuddin, 2018; Maged Farouk, 2022). In

order to achieve best results and outcome, proper training and education is required (M.ElKhatib, 2014). Quality training also improves the capacity of work by increasing the potential and permits worker to perform on a level that is more efficient and superior than what they are currently performing, The quality training must be provided according to the requirements of the position given to worker.

## • PQM at Organization Innovation

Modern and innovative technology is utilized by Organization in order to offer the mobile, satellite and Internet services to the world market (Ahmed and Amiri, 2019; Khatib et al., 2022b; Neyara Radwan, 2022). The capital requirements and firm cost is increased by this way of PQM approach but in return the clients are facilitated by the latest services. In addition to that Organization also receive increased revenue (H. M. Alzoubi et al., 2022b; Haitham M. Alzoubi et al., 2021; Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, 2022). Furthermore, it is the responsibility of trainings and recruitment managers to hire the qualified applicants and provide them with quality training and education to enhance their skills and abilities for future career. By applying this, Organization would receive long term benefits (H. M. Alzoubi et al., 2022d; Khatib et al., 2022d; Saad Masood Butt, 2022).

## • Organization new PQM theory

A new theory has been recorded about Organization PQM. It involves that firm must not focus on increasing the clients in the market but instead they must focus on enhancing and improving the quality of their products and service (Ahmed et al., 2018; Del and Solfa, 2022; El Khatib et al., 2019a; Shamout et al., 2022). Therefore, it would not be wrong to say that Organization current Process Quality Management approach is qualitative rather than quantitative. This is quite effective theory of PQM as clients are attracted toward the business product and services if the quality of product and services are acceptable and satisfy their needs (Amiri et al., 2019; El Khatib et al., 2022; Khatib et al., 2022a; Matloob et al., 2021).

Truly, Process Quality Management approach at Organization by emphasizing on quality creates an effective process that includes a quality change in the job and employees culture at workplace. Organization new PQM approach had encountered few hurdles and difficulties generated by the employees (Lee et al., 2022a; Nasim, S. F. et al., 2022). The adoption was the main obstacle but soon they realized its current advantages and future benefits, therefore PQM approach was accepted by the employees' whole heartedly. Later on Organization management take the long term decision for quality of product (Ahmed and Amponsah, 2018; Ghosh, S., & Aithal, 2022). They decided that extra add-ons products launched by them should be authorized by the quality standard. Moreover, they also decided that Process quality management should be firmly adopted in order to exempt any space for errors, deficiencies and faults (A. Ali et al., 2022; Naqvi et al., 2021). Therefore, to achieve this output, the competitors quality system should be assessed and analyze, Not only this but their product differentiation and product competitive advantages and competencies should also be analyzed (M. Alshurideh et al., 2022; Gaytan et al., 2020; Rehman et al., 2021). The process of identifying the competitors features effective system is proposed and adopted. To run the system qualified analysts, marketers and researchers should be hired.

## 2.3. Impact of Process improvement on Process quality

The process quality could be achieved through process improvement therefore process improvement has directly proportional impact on the process quality (Goria, 2022; Rehman et al., 2022). If the quality is improves the process is improved and if the process is improved the quality of process achieved enhancement (Lee et al., 2022b).

Process Quality Control is not a simple process which you can inject or introduce anywhere in the system (Ghazal, 2021). It is an ongoing process and most of the companies have separate department to ensure quality standards (Amiri et al., 2020; Khatib et al., 2022e; Mehmood et al., 2019). It will carry out my work with the quality management managers, experts and seniors. Many organizations jump in to Process Quality Management in order to drive their business into sustainable profitability. Therefore, it is a very broad continuous improvement initiative (Hanaysha et al., 2021). Process quality required full Leadership commitment and Process Employee involvement in order to produce effective result (Ghazal et al., 2022).

In 1920s Taylor was the first person of USA to have an idea about the quality products that are manufactured (Akhtar, A., Bakhtawar, B., & Akhtar, 2022). As a next step, he introduced that quality ideas a statistical procedure to control US industries and market from 1930s. In addition to that during Second World War, United States proposed the standards of quality ideas (Abudaqa et al., 2021; N. Ali et al., 2022; Khatib, 2022; Suleman et al., 2021). In order to improve the quality procedures different research and empirical studies were carried out in 1950s. The objective was

to fulfill the consumer's demands, requirements and demands by driving out the analytical checkup and involving all employees in the quality procedure by designating the activities to improve the quality (Alzoubi and Yanamandra, 2020; Amrani, A. Z., Urquia, I., & Vallespir, 2022).

W. Edward Deming forms the principle of Process Quality Management in 1980s. Japanese were the first one to implement this idea of principle of PQM (Alhamad et al., 2021; Khan et al., 2021; Rana et al., 2022). Japanese adopted this idea in order to enhance the quality of the goods and manufacture procedures. Meanwhile the United States organizations were refused this PQM idea. In 1990, Hewlett Packard HP was the first firm to begin Process Quality Management approach. In 1992, a research conducted through a survey reported by Electronic Business represents that 91% of 20 firms that implement the Process Quality Management were successful in maintaining the quality standards and improvements(Alzoubi and Aziz, 2021; Lee et al., 2021).

## 2.4. Impact of Dynamic Capabilities and Process Improvement on Process Quality

As we know that Dynamic capabilities involve two element i.e. Resources and strategies and process improvement strategies are the carried out by resources in order to obtain the process quality. Therefore, all three elements are linked with each other (Muhammad Alshurideh et al., 2020; Sakkthivel et al., 2022).

Crosby also builds procedure that was consisted of 14 steps that were considered as the quality enhancing and improvement guidelines (Aslam et al., 2021). He was of the view that Quality could be improved and output zero defects through preventing faults. Therefore, he focuses on prevention. He states that education, awareness and training are the vital tools to decrease faults (Abudaqa et al., 2022; Hamadneh et al., 2021).

In Organization, there was no proper measurement strategy or tool was present that could measure the quality change and thus the output of quality results was not possible. The affects of quality change were difficult to monitor and analyze (Taher M. Ghazal et al., 2021b). Organization Managers were unable to monitor the quality change output (Ali et al., 2021). They must know that the quality change output is negative or positive, effective or ineffective. Therefore, in the beginning they need to refer to the manual documentation for the result that could generate inaccuracy in results at large rate. Therefore, the PQM approach was of no use at the end if it outputs inaccurate results. In addition to that successful implementation and maintenance of PQM approach required accurate results through proper measurement and monitoring (Muhammad Alshurideh et al., 2020).

Furthermore, the middle management and management at the lower level make compatible with the Process Quality management approach as they have the routine dealing with this system but Organization senior management found it difficult to work according to the new PQM approach as they had a habit of working with manual documentation system (ALnuaimi, M., Alzoubi, H., Dana Ajelat & Alzoubi, 2020; H.M. Alzoubi et al., 2021; Gulseven and Ahmed, 2022). The upper management vision, beliefs, mission, business, job and working criteria require more manipulation than the lower employees as Process Quality management is the work field of leadership and managers (Joghee et al., 2020). In the beginning the upper management was of the view that this PQM approach would increase the working and service cost but later they realized it is in fact decreasing the long terms costs required in service and work practices (H. M. Alzoubi et al., 2020; Siddiqui et al., 2021).

Another problem was increasing the prices of the products and services. The critics also state that this Process Quality Management approach increase the costs (H. Alzoubi et al., 2020). The prices of products and services were increased in order to compensate with the cost required for Process Quality Management approach (Alzoubi and Ahmed, 2019; El Khatib et al., 2020a). It was main risk that the product and services may not be acceptable by the clients and would be rejected, especially when same products and services are offered by the competitor i.e. Du, at very low cost. Therefore, the implementation of this Process Quality Management approach brought a great risky notions, assumption and even facts. In the beginning there was seen a little decline as the investment at PQM approach was high and positive results needs time (Alnazer et al., 2017; Bibi et al., 2021). By the time, all the above assumptions were proved wrong and baseless as Organization quality products and services satisfy and were according to customers' needs and demands. UAE is a world of rich and educated people. Customer buying behavior is influenced by quality standards and priorities.

### 3.1. General Research Model



Figure 1: Conceptual Research Model

#### 3. DISCUSSION

After the implementation of Process quality management approach Organization recognizes many positive things. Organization came to know about the beginning and later effects of this approach on the functions of the firm as well as financial and economic condition of the company. The PQM approach had many positive features that contributed in making the quality of other departments improved and up to date.

The team work was the main motive and requirement to run this approach as it was wholly dependent on team work. The contribution of everyone employee was required in this regard. Team work leads this PQM approach to motivate other approaches of different department also. Due to larger firm size of Organization, it was a great challenge for everyone to work as team toward common goal. Organization receive following benefits after implementing the Process Quality approach:

#### 3.1. Increases efficiency

The most important objective of adopting and implementing Process Quality Management in a Organization was to improve process efficiency and attain productivity, by removing issues that arise in Organization workplace routine and processes. Organization was able address main issues that require modifications and involve unwanted tasks, repetitious procedures, and unproductive and ineffective activities and processes.

#### 3.2. Encourages customer satisfaction

Another benefit of Process Quality Management achieved by Organization is related to customer satisfaction. Organization was able to fulfill aims at identifying the best quality by meeting customer expectations through improving the products and services quality. Through this PQM approach, Organization is also able to offer quality services according to consumer needs by assuming challenges and problems in work processes.

#### 3.3.Improves organizational development

Through Process quality management Organization is also able to improving organizational development. Organization is not only focusing in educating and bringing awareness about the significant of quality but is also struggling to avoid faults in business processes instead of doing corrections. Therefore, implementing PQM in Organization would help improve and enhance efficiency and effectiveness in production.

#### 3.4.Flexibility

PQM approach also focus in the formation of Organization departmental teams and groups to encourage and empower knowledge and awareness between the departments. These encouragement and involvement could improve overall organizational development and enhancement of skills, abilities that further results in improved performance of all departments. Moreover, this would encourage flexibility in keeping up cost competitiveness in Organization.

#### 3.5. Promotes supplier/ customer satisfaction

Another benefits achieved by the implementation of PQM in Organization business processes is that it advocates the principle of inner supplier and client satisfaction. For example, the HR department has the authority to settle staffs suggestion, application or queries within a particular time. In addition to that, prevention of faults permits the firm to save time which could be afterward used in other processes of business.

#### 4. CONCLUSION

This research was conducted to look into how businesses develop dynamic capabilities by aligning their business processes and fostering process quality management. Process improvement and dynamic capabilities, were combined into a unified framework as part of this research. The investigation's findings show the organisation learned about the early and later effects of this strategy on the operations of the company as well as its financial and economic situation. The PQM offered numerous advantageous aspects that helped improve and modernize the quality of other departments with proper implementation of dynamic capabilities and process improvement. Additionally, every employee's input is necessary in this regard. Process quality is inspired by teamwork, which also inspires approaches from other departments.

#### REFERENCES

- Abu Zayyad, H.M., Obeidat, Z.M., Alshurideh, M.T., Abuhashesh, M., Maqableh, M., Masa'deh, R., 2020. Corporate social responsibility and patronage intentions: The mediating effect of brand credibility. J. Mark. Commun. 1–24.
- Abudaqa, A., Alzahmi, R.A., Almujaini, H., Ahmed, G., 2022. Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE? Int. J. Entrep. Ventur. 14, 330–350.
- Abudaqa, A., Hilmi, M.F., Almujaini, H., Alzahmi, R.A., Ahmed, G., 2021. Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE). J. E-Learning Knowl. Soc. 17, 110–118.
- Afifi, M., Kaira, D., Ghazal, T., 2020. Integration of collaboration systems in hospitality management as a comprehensive solution. Int. J. Adv. Sci. Technol. 29, 3155–3173.
- Afifi, M.A.M., Kalra, D., Ghazal, T.M., Mago, B., 2020. Information Technology Ethics and Professional Responsibilities. Int. J. Adv. Sci. Technol. 29, 11336–11343.
- Ahmed, G., Amiri, N. Al, 2019. An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code. J. Islam. Stud. Cult. 7, 11–27.
- Ahmed, G., Amponsah, C.T., 2018. Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai. Proc. Ed. 11, 315–334.
- Ahmed, G., Amponsah, C.T., Deasi, S.S., 2018. Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE. Int. J. Bus. Appl. Sci. 7, 13–24.
- Ahmed, G., Nabeel Al Amiri, 2022. the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum. Int. J. Technol. Innov. Manag. 2, 1.
- Ahmed, G., Rafiuddin, A., 2018. Cultural Dimensions of Economic Development: A Case of UAE.

Theor. Econ. Lett. 08, 2479–2496.

- Akhtar, A., Bakhtawar, B., & Akhtar, S., 2022. EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar. Int. J. Technol. Innov. Manag. (IJTIM), 2(2). 2, 80–96.
- Akhtar, A., Akhtar, S., Bakhtawar, B., Kashif, A.A., Aziz, N., Muhammad, &, Javeid, S., 2021. COVID-19 Detection from CBC using Machine Learning Techniques. Int. J. Technol. Innov. Manag. 1, 65– 78.
- Al Batayneh, R.M., Taleb, N., Said, R.A., Alshurideh, M.T., Ghazal, T.M., Alzoubi, H.M., 2021. IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living. pp. 235– 247.
- Al Kurdi, B., Alshurideh, M., Al afaishata, T., 2020. Employee retention and organizational performance: Evidence from banking industry. Manag. Sci. Lett. 10, 3981–3990.
- Alhamad, A., Alshurideh, M., Alomari, K., Al Kurdi, B., Alzoubi, H., Hamouche, S., Al-Hawary, S., 2022. The effect of electronic human resources management on organizational health of telecommunications companies in Jordan. Int. J. Data Netw. Sci. 6, 429–438.
- Alhamad, A.Q.M., Akour, I., Alshurideh, M., Al-Hamad, A.Q., Kurdi, B. Al, Alzoubi, H., 2021. Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM. Int. J. Data Netw. Sci. 5, 311–320.
- Ali, A., Septyanto, A.W., Chaudhary, I., Hamadi, H.A., Alzoubi, H.M., Khan, Z.F., 2022. Applied Artificial Intelligence as Event Horizon Of Cyber Security, in: 2022 International Conference on Business Analytics for Technology and Security (ICBATS. pp. 1–7.
- Ali, N., Ahmed, A., Anum, L., Ghazal, T.M., Abbas, S., Khan, M.A., Alzoubi, H.M., Ahmad, M., 2021. Modelling supply chain information collaboration empowered with machine learning technique. Intell. Autom. Soft Comput. 30, 243–257.
- Ali, N., Ghazal, T.M., Ahmed, A., Abbas, S., Khan, M. A., Alzoubi, H.M., Farooq, U., Ahmad, M., Khan, Muhammad Adnan, 2022. Fusion-based supply chain collaboration using machine learning techniques. Intell. Autom. Soft Comput. 31, 1671–1687.
- Alnazer, N.N., Alnuaimi, M.A., Alzoubi, H.M., 2017. Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities. Int. J. Bus. Excell. 13, 127–140.
- ALnuaimi, M., Alzoubi, H., Dana Ajelat & Alzoubi, A., 2020. Toward Intelligent Organizations: An Empirical investigation of Learning Orientation's role in Technical Innovation. Int. J. Innov. Learn. 29, 207–221.
- Alsharari, N., 2022. the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation. Int. J. Technol. Innov. Manag. 2, 1.
- Alsharari, N., 2021. Integrating Blockchain Technology with Internet of things to Efficiency. International Journal of Technology. Innov. Manag. (IJTIM), 1, 1–13.
- Alshurideh, M., Al Kurdi, B., Abu Hussien, A., Alshaar, H., 2017. Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market. J. Mark. Commun. 23, 513–532.
- Alshurideh, M., Al Kurdi, B., Abumari, A., Salloum, S., 2018. Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan. Mod. Appl. Sci. 12, 210–222.

Alshurideh, M., Al Kurdi, B., Alzoubi, H.M., Ghazal, T.M., Said, R.A., AlHamad, A.Q., Hamadneh, S.,

Sahawneh, N., Al-kassem, A.H., 2022. Fuzzy assisted human resource management for supply chain management issues. Ann. Oper. Res. 1–19.

- Alshurideh, M., Al Kurdi, B., Salloum, S.A., Arpaci, I., Al-Emran, M., 2020. Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms. Interact. Learn. Environ.
- Alshurideh, Muhammad, Gasaymeh, A., Ahmed, G., Alzoubi, H., Kurd, B. Al, 2020. Loyalty program effectiveness: Theoretical reviews and practical proofs. Uncertain Supply Chain Manag. 8, 599–612.
- Alshurideh, M., Masa'deh, R., Alkurdi, B., 2012. The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation. Eur. J. Econ. Financ. Adm. Sci. 47, 69–78.
- Alshurideh, M., Salloum, S.A., Al Kurdi, B., Monem, A.A., Shaalan, K., 2019. Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study. Int. J. Interact. Mob. Technol. 13, 157–183.
- Alshurideh, M.T., Al Kurdi, B., Alzoubi, H.M., Obeidat, B., Hamadneh, S., Ahmad, A., 2022. The influence of supply chain partners' integrations on organizational performance: The moderating role of trust. Uncertain Supply Chain Manag. 10, 1191–1202.
- Alshurideh, M.T., Al Kurdi, B., Masa'deh, R., Salloum, S.A., 2021. The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers. Rev. Int. Bus. Strateg. 31, 375–396.
- Alzoubi, A., 2022. MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES. Int. J. Comput. Inf. Manuf. 2, 2022.
- Alzoubi, A., 2021. Renewable Green hydrogen energy impact on sustainability performance. Int. J. Comput. Inf. Manuf. 1, 2021.
- Alzoubi, H., Ahmed, G., 2019. Do TQM practices improve organisational success? A case study of electronics industry in the UAE. Int. J. Econ. Bus. Res. 17, 459–472.
- Alzoubi, H., Alshurideh, M., Kurdi, B. Al, Akour, I., Aziz, R., 2022. Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation. Int. J. Data Netw. Sci. 6, 449–460.
- Alzoubi, H., Alshurideh, M., Kurdi, B. Al, Inairat, M., 2020. Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context. Uncertain Supply Chain Manag. 8, 579–588.
- Alzoubi, H.M., Ahmed, G., Al-Gasaymeh, A., Al Kurdi, B., 2020. Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration. Manag. Sci. Lett. 10, 703–708.
- Alzoubi, H.M., Ahmed, G., Alshurideh, M., 2022a. An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction. Int. J. Product. Qual. Manag. 36, 169–186.
- Alzoubi, Haitham M., Alshurideh, M., Ghazal, T.M., 2021. Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective. The International Conference on Artificial Intelligence and Computer Vision,. 10.1007/978-3-030-76346-6\_48, pp. 527–538.
- Alzoubi, H.M., Alshurideh, M.T., Kurdi, B. Al, Alhyasat, K.M.K., Ghazal, T.M., 2022b. The effect of epayment and online shopping on sales growth: Evidence from banking industry. Int. J. Data Netw. Sci. 6, 1369–1380.

- Alzoubi, H.M., Aziz, R., 2021. Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation. J. Open Innov. Technol. Mark. Complex. 7, 130.
- Alzoubi, H.M., Elrehail, H., Hanaysha, J.R., Al-Gasaymeh, A., Al-Adaileh, R., 2022c. The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis. Int. J. Serv. Sci. Manag. Eng. Technol. 13, 1–11.
- Alzoubi, H.M., Ghazal, T.M., Hasan, M.K., Alketbi, A., Kamran, R., Al-Dmour, N.A., Islam, S., 2022d. Cyber Security Threats on Digital Banking, in: 2022 1st International Conference on AI in Cybersecurity (ICAIC. pp. 1–4.
- Alzoubi, H.M., In'airat, M., Ahmed, G., 2022e. Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai. Int. J. Bus. Excell. 27, 94–109.
- Alzoubi, H.M., Vij, M., Vij, A., Hanaysha, J.R., 2021. What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions. ENLIGHTENING Tour. A PATHMAKING J. 11, 102–135.
- Alzoubi, H.M., Yanamandra, R., 2020. Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance. Uncertain Supply Chain Manag. 8, 273–284.
- Amiri, N. Al, Rahim, R.A., ..., 2019. The organizational resources and knowledge management capability: A systematic review. Bus. Econ. ... 15, 636–647.
- Amiri, N. Al, Rahim, R.E.A., Ahmed, G., 2020. Leadership styles and organizational knowledge management activities: A systematic review. Gadjah Mada Int. J. Bus. 22, 250–275.
- Amponsah, C.T., Ahmed, G., Kumar, M., Adams, S., 2018. The business effects of mega-sporting events on host cities: An empirical view. Probl. Perspect. Manag. 16, 324–336.
- Amrani, A. Z., Urquia, I., & Vallespir, B., 2022. INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir. Int. J. Technol. Innov. Manag. (IJTIM), 2(2). 2, 33–51.
- Aslam, M.S., Ghazal, T.M., Fatima, A., Said, R.A., Abbas, S., Khan, M.A., Siddiqui, S.Y., Ahmad, M., 2021. Energy-efficiency model for residential buildings using supervised machine learning algorithm. Intell. Autom. Soft Comput. 30, 881–888.
- Bibi, R., Saeed, Y., Zeb, A., Ghazal, T.M., Rahman, T., Said, R.A., Abbas, S., Ahmad, M., Khan, M.A., 2021. Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning. Comput. Intell. Neurosci. 2021, 1–19.
- Del, F., Solfa, G., 2022. IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa. Int. J. Technol. Innov. Manag. (IJTIM), 2(2). 2, 18–32.
- Edward Probir Mondol, 2022. the Role of Vr Games To Minimize the Obesity of Video Gamers. Int. J. Comput. Inf. Manuf. 2, 1.
- El Khatib, D.M.M., 2015. Integrating Project Risk Management and Value Engineering in Tendering Processes. Int. J. Eng. Res. 4, 442–445.
- El Khatib, M., Al Falasi, A., 2021. Effects of Artificial Intelligence on Decision Making in Project Management. Am. J. Ind. Bus. Manag. 11, 251–260.
- El Khatib, M., Al Jaberi, A., Al Mahri, A., 2021a. Benchmarking Projects' "Lessons Learned" through Knowledge Management Systems: Case of an Oil Company. iBusiness 13, 1–17.

- 54
- El Khatib, M., Alabdooli, K., AlKaabi, A., Al Harmoodi, S., 2020a. Sustainable Project Management: Trends and Alignment. Theor. Econ. Lett. 10, 1276–1291.
- El Khatib, M., Almteiri, M., Al Qasemi, S.A., 2021b. The Correlation between Emotional Intelligence and Project Management Success. iBusiness 13, 18–29.
- El Khatib, M., Hammerschmidt, M., Al Junaibi, M., 2021c. Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate. Int. J. Manag. Cases 23, 46–62.
- El Khatib, M., Nakand, L., Almarzooqi, S., Almarzooqi, A., 2020b. E-Governance in Project Management: Impact and Risks of Implementation. Am. J. Ind. Bus. Manag. 10, 1785–1811.
- El Khatib, M.M., Ahmed, G., 2020. Robotic pharmacies potential and limitations of artificial intelligence: A case study. Int. J. Bus. Innov. Res. 23, 298–312.
- El Khatib, M.M., Ahmed, G., 2019. Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS. Int. J. Innov. Technol. Explor. Eng. 9, 1211–1215.
- El Khatib, M.M., Ahmed, G., 2018. Improving Efficiency in IBM Asset Management Software System "Maximo": A Case Study of Dubai Airports and Abu Dhabi National Energy Company. Theor. Econ. Lett. 08, 1816–1829.
- El Khatib, M.M., Ahmed, G., Al-Nakeeb, A., 2019a. Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE. Mod. Econ. 10, 137–155.
- El Khatib, M.M., Al-Nakeeb, A., Ahmed, G., 2019b. Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study. iBusiness 11, 1–10.
- El Khatib, M.M., Alzoubi, H.M., Ahmed, G., Kazim, H.H., Falasi, S.A.A. Al, Mohammed, F., Mulla, M. Al, 2022. Digital Transformation and SMART-The Analytics factor, in: 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022. pp. 1–11.
- Eli, T., 2021. Students` Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study. Int. J. Technol. Innov. Manag. 1, 90–104.
- Eli, T., Lalla Aisha Sidi Hamou, 2022. Investigating the Factors That Influence Students` Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania. Int. J. Technol. Innov. Manag. 2, 1.
- Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, K., 2022. Agile Project Management and Project Risks Improvements: Pros and Cons. Mod. Econ. 13, 1157–1176.
- Farouk, M., 2021. The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19. Int. J. Comput. Inf. Manuf. 1, 77–93.
- Gaytan, J.C.T., Sakthivel, A.M., Desai, S.S., Ahmed, G., 2020. Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study. Skyline Bus. J. 16, 45–54.
- Ghazal, T., Soomro, T.R., Shaalan, K., 2013. Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI). Eur. J. Sci. Res. 99, 418{\textendash}428.
- Ghazal, T.M., 2021. Positioning of UAV base stations using 5G and beyond networks for IOMT applications. Arabian Journal for Science and Engineering.
- Ghazal, Taher M, Anam, M., Hasan, M.K., Hussain, M., Farooq, M.S., Ali, H.M., Ahmad, M., Soomro, T.R., 2021a. Hep-Pred: Hepatitis C staging prediction using fine gaussian SVM. Comput Mater Contin. 69, 191–203.

- Ghazal, Taher M., Hasan, M.K., Alshurideh, M.T., Alzoubi, H.M., Ahmad, M., Akbar, S.S., Al Kurdi, B., Akour, I.A., 2021b. IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review. Futur. Internet 13, 218.
- Ghazal, Taher M., Hussain, M.Z., Said, R.A., Nadeem, A., Hasan, M.K., Ahmad, M., Khan, M.A., Naseem, M.T., 2021c. Performances of k-means clustering algorithm with different distance metrics. Intell. Autom. Soft Comput. 30, 735–742.
- Ghazal, T.M., Kamrul Hasan, M., Alzoubi, H.M., Al Hmmadi, M., Al-Dmour, N.A., Islam, S., Kamran, R., Mago, B., 2022. Securing Smart Cities Using Blockchain Technology, in: 2022 1st International Conference on AI in Cybersecurity (ICAIC. pp. 1–4.
- Ghazal, Taher M., Khan, Q.T.A., Abbas, S., Khan, W.A., Khan, M.A., Said, R.A., Ahmad, M., Asif, M., 2021d. Modeling habit patterns using conditional reflexes in agency. Intell. Autom. Soft Comput. 30, 539–552.
- Ghazal, T M, Said, R.A., Taleb, N., 2021. Internet of vehicles and autonomous systems with AI for Medical Things. Soft Computing.
- Ghosh, S., & Aithal, P.S., 2022. BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT. Int. J. Technol. Innov. Manag. (IJTIM), 2(2). 2, 65–79.
- Goria, S., 2022. A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE. Int. J. Technol. Innov. Manag. (IJTIM), 2(2). 2, 1–17.
- Guergov, S., Radwan, N., 2021. Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain. Int. J. Comput. Inf. Manuf. 1, 1–17.
- Gulseven, O., Ahmed, G., 2022. The State of Life on Land (SDG 15) in the United Arab Emirates. Int. J. Soc. Ecol. Sustain. Dev. 13, 1–15.
- Hamadneh, S., Pedersen, O., Alshurideh, M., Kurdi, B.A., Alzoubi, H.M., 2021. An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain. J. Leg. Ethical Regul. Issues 24, 1–12.
- Hammad, A., Bataineh, A., Alshurideh, M., Salhab, H., 2022. Factors affecting healthcare providers to accept digital marketing: The moderating role of subjective norms. Int. J. Data Netw. Sci. 6, 1085–1098.
- Hanaysha, J., Al-Shaikh, M., M. Alzoubi, H., 2021. Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market. Int. J. Serv. Sci. Manag. Eng. Technol. 12, 56–72.
- Hanaysha, J.R., Al-Shaikh, M.E., Joghee, S., Alzoubi, H.M., 2022. Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises. FIIB Bus. Rev. 11, 67–78.
- Joghee, S., Alzoubi, H.M., Dubey, A.R., 2020. Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects. Int. J. Sci. Technol. Res. 9, 3499–3503.
- John Kasem, Anwar Al-Gasaymeh, 2022. a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries. Int. J. Technol. Innov. Manag. 2, 1.
- Kashif, A.A., Bakhtawar, B., Akhtar, A., Akhtar, S., Aziz, N., Javeid, M.S., 2021. Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques. Int. J. Technol. Innov. Manag. 1, 79–89.
- Khan, M.A., 2021. Challenges Facing the Application of IoT in Medicine and Healthcare. Int. J. Comput. Inf. Manuf. 1, 39–55.

- Khan, M.F., Ghazal, T.M., Said, R.A., Fatima, A., Abbas, S., Khan, M. A., Issa, G.F., Ahmad, M., Khan, Muhammad Adnan, 2021. An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique. Comput. Intell. Neurosci. 2021.
- Khatib, E., M., Z., A., R., Al-Nakeeb, A., 2021. The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE). Int. J. Appl. Eng. Res. 6, 1.
- Khatib, M. El, 2022. BIM as a tool to optimize and manage project risk management. Int. J. Mech. Eng. 7, 6307–6323.
- Khatib, M. El, Alhosani, A., Alhosani, I., Matrooshi, O. Al, Salami, M., 2022a. Simulation in Project and Program Management: Utilization, Challenges and Opportunities. Am. J. Ind. Bus. Manag. 12, 731– 749.
- Khatib, M. El, AlMaeeni, A., Alkamali, W., 2022b. The Relation between Effective Digital Program Governance and Program Success. Am. J. Ind. Bus. Manag. 12, 1402–1418.
- Khatib, M. El, Beshwari, F., Beshwari, M., Beshwari, A., 2021. The impact of blockchain on project management. ICIC Express Lett. 15, 467–474.
- Khatib, M. El, Blooshi, S. Al, Al-habeeb, A., 2016. The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE. IOSR J. Bus. Manag. (IOSR-JBM 18, 38–46.
- Khatib, M. El, Hamidi, S., Ameeri, I. Al, Zaabi, H. Al, Marqab, R. Al, 2022c. Digital Disruption and Big Data in Healthcare-Opportunities and Challenges. Clin. Outcomes Res. 14, 563–574.
- Khatib, M. El, Hammadi, A. Al, Hamar, A. Al, Oraby, K., Abdulaziz, M., 2022d. How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE. Am. J. Ind. Bus. Manag. 12, 1067–1078.
- Khatib, M. El, Kherbash, A., Qassimi, A. Al, Mheiri, K. Al, 2022e. How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management? J. Serv. Sci. Manag. 15, 297–307.
- Khatib, M. El, Mulla, A. Al, Ketbi, W. Al, 2022f. The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management. Adv. Internet Things 12, 88–109.
- Khatib, M.M. El, Opulencia, M.J.C., 2015. The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates. Procedia Econ. Financ. 23, 1354–1357.
- Kurdi, B. Al, Alshurideh, M., Akour, I., Alzoubi, H.M., Obeidat, B., Alhamad, A., 2022a. The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets. Int. J. Data Netw. Sci. 6, 1175–1185.
- Kurdi, B. Al, Alshurideh, M., Salloum, S.A., Obeidat, Z.M., Al-dweeri, R.M., 2020. An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach. Int. J. Interact. Mob. Technol. 14, 19–41.
- Kurdi, B. Al, Alzoubi, H.M., Akour, I., Alshurideh, M.T., 2022b. The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry. Uncertain Supply Chain Manag. 10, 1111–1116.
- Kurdi, B., Alshurideh, M., Akour, I., Tariq, E., AlHamad, A., Alzoubi, H., 2022. The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention. Int. J. Data Netw. Sci. 6, 1135–1146.
- Kurdi, B., Alshurideh, M., Alnaser, A., 2020. The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. Manag. Sci. Lett. 10, 3561–3570.

- Kurdi, B.A., Alshurideh, M., Salloum, S.A., 2020. Investigating a theoretical framework for e-learning technology acceptance. Int. J. Electr. Comput. Eng. 10.
- Lee, K.L., Azmi, N.A.N., Hanaysha, J.R., Alzoubi, H.M., Alshurideh, M.T., 2022a. The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry. Uncertain Supply Chain Manag. 10, 495–510.
- Lee, K.L., Romzi, P.N., Hanaysha, J.R., Alzoubi, H.M., Alshurideh, M., 2022b. 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 Manag. 10, 537–550.
- Lee, S.-W., Hussain, S., Issa, G.F., Abbas, S., Ghazal, T.M., Sohail, T., Ahmad, M., Khan, M.A., 2021. Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making. IEEE Access 9, 159399–159412.
- M.ElKhatib, M., 2014. Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions. Int. J. Appl. Inf. Syst. 7, 6–12.
- Maged Farouk, 2022. Studying Human Robot Interaction and Its Characteristics. Int. J. Comput. Inf. Manuf. 2, 1.
- Matloob, F., Ghazal, T.M., Taleb, N., Aftab, S., Ahmad, M., Khan, M.A., Abbas, S., Soomro, T.R., 2021. Software defect prediction using ensemble learning: A systematic literature review. IEEE Access 9, 98754–98771.
- Mehmood, T., 2021. Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery? Empir. Evid. from E-Commerce Ind. 1, 14–41.
- Mehmood, T., Alzoubi, H.M., Alshurideh, M., Al-Gasaymeh, A., Ahmed, G., 2019. Schumpeterian entrepreneurship theory: Evolution and relevance. Acad. Entrep. J. 25, 1–10.
- Miller, D., 2021. The Best Practice of Teach Computer Science Students to Use Paper Prototyping. Int. J. Technol. Innov. Manag. 1, 42–63.
- Mondol, E.P., 2021. The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry. Int. J. Comput. Inf. Manuf. 1, 56–76.
- Nada Ratkovic, 2022. Improving Home Security Using Blockchain. Int. J. Comput. Inf. Manuf. 2, 1.
- Naqvi, R., Soomro, T.R., Alzoubi, H.M., Ghazal, T.M., Alshurideh, M.T., 2021. The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies, in: The International Conference on Artificial Intelligence and Computer Vision. pp. 838–853.
- Nasim, S. F., Ali, M.R., Kulsoom, U., 2022. Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management. Int. J. Technol. Innov. Manag. 2, 52–64.
- Neyara Radwan, 2022. the Internet'S Role in Undermining the Credibility of the Healthcare Industry. Int. J. Comput. Inf. Manuf. 2, 1.
- Obaid, A.J., 2021. Assessment of Smart Home Assistants as an IoT. Int. J. Comput. Inf. Manuf. 1, 18-38.
- Qasaimeh, G.M., Jaradeh, H.E., 2022. THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS. Int. J. Technol. Innov. Manag. 2.
- Ramakrishna, Y., Alzoubi, H.M., 2022. Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations. Oper. Supply Chain Manag. 15, 122– 135.

- Rana, S., Verma, S., Haque, M.M., Ahmed, G., 2022. Conceptualizing international positioning strategies for Indian higher education institutions. Rev. Int. Bus. Strateg. 32, 503–519.
- Rehman, A.U., Saleem, R.M., Shafi, Z., Imran, M., Pradhan, M., Alzoubi, H.M., 2022. Analysis of Income on the Basis of Occupation using Data Mining, in: 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022. pp. 1–4.
- Rehman, E., Khan, M.A., Soomro, T.R., Taleb, N., Afifi, M.A., Ghazal, T.M., 2021. Using blockchain to ensure trust between donor agencies and ngos in under-developed countries. Computers 10, 8.
- Saad Masood Butt, 2022. Management and Treatment of Type 2 Diabetes. Int. J. Comput. Inf. Manuf. 2, 1.
- Sakkthivel, A.M., Ahmed, G., Amponsah, C.T., Muuka, G.N., 2022. The influence of price and brand on the purchasing intensions of Arab women: an empirical study. Int. J. Bus. Innov. Res. 28, 141–161.
- Shamout, M., Ben-Abdallah, R., Alshurideh, M., Alzoubi, H., Al Kurdi, B., Hamadneh, S., 2022. A conceptual model for the adoption of autonomous robots in supply chain and logistics industry. Uncertain Supply Chain Manag. 10, 577–592.
- Siddiqui, S.Y., Haider, A., Ghazal, T.M., Khan, M.A., Naseer, I., Abbas, S., Rahman, M., Khan, J.A., Ahmad, M., Hasan, M.K., Mohammed, A., Ateeq, K., 2021. IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning. IEEE Access 9, 146478– 146491.
- Suleman, M., Soomro, T.R., Ghazal, T.M., Alshurideh, M., 2021. Combating Against Potentially Harmful Mobile Apps, in: The International Conference on Artificial Intelligence and Computer Vision. Springer, pp. 154–173.
- Tellez, J., Ateeq, D., Rafiuddin, A., Alzoubi, H., Ghazal, T., Ahanger, T., Chaudhary, S., Viju, G., 2022. AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models. Comput. Intell. Neurosci. 2022, 1–13.
- Vorobeva Victoria, 2022. Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry. Int. J. Technol. Innov. Manag. 2.
- Zeeshan Zafar, S., Zhilin, Q., Mabrouk, F., Ramirez-Asis, E., Alzoubi, H.M., Hishan, S.S., Michel, M., Hishan Ã, S.S., 2022. Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries.

# IMPACT OF INVENTORY MANAGEMENT AND SERVICE STRATEGY ON SERVICE PROCESS IMPROVEMENT IN HOSPITALITY SECTOR

#### Samer Hamadneh<sup>1</sup>, Muhammad Turki Alshurideh<sup>2</sup>, Barween Al Kurdi<sup>3</sup>, Hevron Alshurideh<sup>4</sup>

<sup>1</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan. Orcid [0000-0003-2037-1813],.s.hamadneh@ju.edu.jo

<sup>2</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>3</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

<sup>3</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>4</sup> Department of Foreign Languages, Faculty of English Language and Literature, The University of Jordan, Amman 11942, Jordan, Hevronalshurideh@gmail.com

#### ABSTRACT

The primary goal of this research is to analyze how inventory management practices and service strategy affected the performance and competitiveness of service organizations. The research findings suggest that increased levels of inventory management can boost competitive advantage and boost organizational performance. Despite the inventory management strategy having a direct favorable effect on organizational performance, the study also discovered that a competitive edge can be achieved if an organization have an improved services through efficient inventory management strategies.

Keywords: Inventory Management, Service Strategy, Service Process Improvement.

#### 1. INTRODUCTION

By looking at increasing demand in the service sector due to COVID19 there are many service sector firms which are paying more focus on inventory management so that they can improve their service strategy. This is helpful in planning, forecasting future demand and managing all the stock in significant manner so that companies can deliver services to buyers timely [1], [2]. Inventory management has great impact over meeting customer demand. Companies make its employees able to understands needs of buyers and manage its warehousing accordingly so that it can improve its service strategy in order to meet expectation of wide range of consumers in significant manner [3], [4]. The main agenda of service strategy is to analyze the pattern and plans that service providers need to execute in order to get best outcome [5], [6]. Service strategy always concentrates on how value is being delivered to end users and to what extent it is able to meet these expectations of customers in service industry. Inventory management always helps in making balance between demand and supply and controlling over cost so that needs of buyers to get cost effective quality products can be met [7]. This is the best way through which enterprise can gain more opportunities and can deliver best quality services to the end user. Furthermore, a theoretical nature of research emphasized to evaluate the literature based evidences to identify the impact of inventory management and service strategy on service process improvement.

#### 2. LITERATURE REVIEW

#### 2.1. Impact of inventory management on service strategy

[8] article describes inventory management and the extent to which it impacts on service. [9] states fair inventory management in hotel market. Sun, 2020 article describes the multi-echelon inventory control in supply chain. [10] discusses efficiency optimization in supply chain network and impact of inventory management. [11], [12] emphasis on preservation of service level in the inventory management. [13] service strategy can be defined as customer centric process that always consider needs of buyers and offer them products according to their requirements [14]. Companies manage all its operations in a manner so that these functional units work together and create excellence service strategy that can satisfy consumers and can retain them in business for longer duration [15]. Companies which are running in the service sector such as hotels, restaurants, hospitals always emphasizes on improving their service strategies so that they can retain their

consumers in the business unit for longer duration [16]–[18]. Inventory management plays significant role in improving service strategy. Effective inventory management always aids in managing warehouse stock well and managing accurate inventory transactions [19]. This is beneficial in order to minimize difference between actual and accounting level of stock [20].

According to [21], [22] there is significant relationship between order processing and service strategy of company. This is responsibilities of management that to manage its order and process all goods in significant manner so that wastage can be minimized [23]. Inventory management team ensures the market demand and makes order of raw material accordingly [24], [25]. Storage of all the stocks are done in proper manner so that resource wastage can be eliminated and these inventories can be used in best possible manner [26]. In order to manage inventory in effective manner service organizations ensure to make control over stock and using automated transportation system. This automated system of transportation always supports in reducing cost of transportation [27]. By this way raw material can be reached to warehouse in cost effective manner and companies can serve consumers in cost effective manner [28]. If operational cost of companies is less then entities become able to deliver goods and services to end users in cheaper prices [29], [30]. Hence good inventory management and controlling practices allow organization in improving its services strategies and resolving complains of consumers significantly [31], [32].

[33] stated that multi-echelon inventory control is considered as major issue in supply chain management. Decentralization strategies are helpful in making effective control over inventory [34]. Each mode of operations needs to determine order point and must adopts inventory optimization strategy [35], [36]. This decentralization inventory management strategy can help business in reducing cost and meeting actual needs of buyers in significant manner [37]. Service strategy emphasis on meeting buyer's expectation, hence decentralization inventory controlling process can be able to meeting this expectation significantly [38], [39]. Centralized inventory management strategy also works well where core enterprise is responsible for data integration and supply stock to each department [40], [41]. Echelon inventory causes issue in the supply chain process, but effective management of inventory aids business in seeking customer feedback and managing stock properly so that desired results can be generated and consumers can become positive towards the brand [42].

#### 2.2. Impact of inventory management on service process improvement

[43] article discusses integrated inventory management and improving order fulfillment performance. [44], [45] states about the impact of inventory management and procurement practices on organizational performance. [46] states about impact of inventory management practices on firm's competitiveness. [47], [48] describes supply chain inventory management and value of shared information. [49] states inventory management by an automated warehouse management system and the extent to which performance improvement is possible by this system [50].

According to [51], [52] service process improvement is the tool that is used for maximizing effectiveness and efficiency of customer service process. In the recent time service industries are facing huge challenges hence there is need to understand the current gap in process and need to design service by considering future process [53], [54]. Process improvement methods always work to identify flaws between desired process and actual process and find out new opportunities through which this gap can be filled soon [55], [56]. In order to remain competitiveness in the market there is essential to reduce cost and enhance revenues of companies [57], [58]. Consumers always expect to get high quality products at affordable rates. Inventory management always concentrates on managing inventory well so that control over customer demand can maintained. This can help in improving process as customer satisfaction gets raised and gap between expected and actual process can be minimized [59]–[61]. This gives amazing financial outcome to business unit and aid organization in gaining success in market. By controlling over the business environment cost through making effective inventory management strategies service firms can improve process well and can meet expectation of buyers [62].

As per the view of [63] efficiency inventory flow in value chain can aid in managing tradeoff between demand and supply of inventory. This minimizes imbalance and always help in gaining positive outcome to business unit [64]. There is significant impact of warehouse management stock as firms need to store enough inventory that is able to meet demand [65]–[67]. Adequate order processing, managing inventory well can aid in minimizes cost and generating positive outcome by improving service process. It saves money of firm and this capital can be used for further quality improvement so that consumers needs can be satisfied [68], [69].

[70] stated that there is significant impact of warehouse management on supply chain performance. It provides desired results in less resource efforts and reliable inventory management [71]. Customized software always reviews each inventory transaction and ensures to enhance work flow sop that process can be improved. [72], [73] argued that supply chain inventory management is considered as great method of process improvement. Information technology always help business unit to share demand and manage inventory data well and reduce cost as well. Companies have to bear inventory holding cost, break order penalty cost etc. All these things can be managed by effective inventory management [74], [75]. This can reduce cost of entire operation and can aid Service Company in improving its process by meeting expectation of customers [76]. Information technology improves process of information sharing becomes easy which supports organization in reducing cost and enhancing efficiency of process of goods and services so that service needs of buyers can be fulfilled [77].

As per the view of [78] integrated inventory management system is considered as great way of improving service process improvement. This improves order fulfillment performance of companies and makes them able to deliver best quality services to their consumers in order to gain competitive advantage [79]. Significant inventory management works as fundamental practice that meet excellence and help in improve supply chain process. Inventory control policies, inventory classification aid business in maximizing order fulfillment performance and enterprise can meet its profit expectation as well [80]. Inventory solution tools are useful in enhancement of process [81], [82]. By this way safer inventory decision can be taken which helps business in meeting performance level and improving service process in effective manner [83]. One of the major reasons of poor process in services is ineffective master data management. This issue can be resolved through managing data in significant manner [84]. Inventory management software allows business to have an eye over the stock and improve its procurement services [85], [86]. Effective inventory planning can allow the firm to gain more opportunities and enhancing process capacity to great extent.

#### 2.3. Impact of service strategy on service process improvement

[87] states about the impact of service management process improvement. [88] discusses about various improvement strategies on transit service reliability. [89] states impact of training on improving hotel service quality. [90] describes service quality improvements in food company.

[44] states impact of store and salesperson dimensions of retail service quality on consumer returns.

As per the view of in the recent time there are many information technologies companies those which are paying more attention over improving service management process [91]. Companies are implementing these information technologies in order to enhance their process. Use of such advance technologies allow companies to make effective control over transactions and making positive changes in entire process so that significant results can be generated [92], [93]. Involvement of IT in service management minimizes transaction cost and minimizes errors as well which is beneficial for companies to control over cost [94], [95]. This aids in delivering cost effective quality services to end users hence this is the way through which companies can improve their process and can gain success in the market. Process improvement initiatives can be taken when problem is identified. These advance technologies are helpful in minimizing mistakes so that right decision can be taken in order to improve process of companies [96].

[97] argued that companies that are operating in the service sector always concentrate on offering reliable services to its consumers. STM, scheduling can aid in minimizing variation in the running time [98]. By this way companies can be able to deliver goods and services to buyers whenever they needed [99]. These kinds of service strategies are helpful in offering real time services to consumers and improving existing process in order to meet expectation of stakeholders [100]. AVL and TSP are considered as effective strategies for process improvement as it minimizes delay and minimizes cost as well which aids in improving process greatly.

As per the view of [101] training is the part of service strategy that helps business in improving employee's performance and encourages them to retain in the firm for longer duration [102]. There are many companies which are running in service sector are giving essential training to their staff members so that employees can understand needs of buyers and can deliver them services as per their requirements [103], [104]. Training has great impact over the service quality of consumers of hotel always expect to get quick services. Training improves knowledge of people about industry standards and requirements of buyers. By this way these talented people can utilize their training knowledge well in order to provide quality service to end users. This is the best way through which process improvement can be achieved. Satisfactory training programs in hotel develop quality of hotel services [105]–[107]. Process improvement is the strategy in which

companies analysis loop fall in existing process and find out strategies through which these loop falls can be eliminated. Hotels always concentrate on giving quality training to their staff members so that they can deliver best services to their consumers. Training develops strength of workers and makes them able to serve consumers well [108]. This is the best way through which service process improvement is possible. Ineffective knowledge and poor training can create difficulties for staff members to understand basic needs of buyers and meet their expectation. But training enhances confidence and knowledge of people and make them able to understand the common goal of business and delivering quality services to buyers so that this goal of organization can be accomplished [103], [109]. Adoption of total quality system is helpful in improving quality culture in business unit. Training services to hotel staff members help people to understand their lacking areas and improve these lacking points [110]. Former training with the assistance of competent techniques can enable firm in minimizing shortage of performance issue and improving process of services.

stated that reviewing current volume revision and consolidation of different product categories can aid the firms in improving service quality [111], [112]. Food companies prefer to deliver best quality food to consumers. In order to meet this expectation and improving the process, these firms are required to review its products categories. This can aid in knowing whether consumers are satisfied with existing category of food or not. If not then managers can make changes into system to meet expectation of consumers [113]. This can help organization in service process improvement. In the absence of it firms cannot fulfill demand of buyers which can cause issue in sustaining in market for longer duration [114], [115].

According to [116] store and sales person dimensions have great impact over the service quality. Service strategies that are used by many companies are related with the improving sales person dimension. Sales person exchange information with the end consumers and try to convenience consumers to take interest in services of company [117]–[119]. Availability of competent sales persons in the stores and friendly store environment strategies are helpful in process improvement [120]. This can give great shopping experience to customers and can help in meeting quality parameters greatly.

#### 2.4. Impact of inventory management and service strategy on service process improvement

[121] emphasizes on service Quality Improvement Using the Six Sigma Method. [122] states areas for improvement in service process-the Knowledge Management and Value Stream Mapping. IT Outsourcing and Vendor Cost Improvement Strategies. [123]elaborates Six Sigma Method for service quality improvements. states about the continual service improvement practices [124].

As per the view of [125] service strategy of prioritize the customer needs always aid business to make improvement in its existing service process. Consumers always compare company's products with other competitors [44]. They expect to get best quality services at affordable rates. Customer centric is the major service strategy that allows companies to focus more on needs of buyers and deliver them excellent services so that they become positive towards the brand. Companies are unable to deliver them great quality services and unable to meet their expectation then firms cannot be able to retain these people in firm for longer duration [126]. Customer centric prioritization is supportive in process improvement as it makes them feel valued and they always share their ideas so that business can make positive changes in its services in order to make its more effective [127]. Existing approach majorly concentrates on meeting process efficiency target [128], [129]. But value based process can aid in making sound decisions so that companies can meet expectation of its consumers can enhance their satisfaction level. This service strategy tool enables firms to meet the process improvement targets significantly [130].

According to [131] value stream mapping is the tool of service strategy that is used by business to improve service process. Companies prefer to involve its consumers in process o that their actual needs can be analyzed. This is the best tool through which companies can make their consumers feel valued [132]. This enhances their level of satisfaction and make them able to work be loyal towards the brand. Principle of knowledge management is helpful in meeting service improvement targets. [133]argued that inventory management is highly depended upon the vendor cost. If vendor cost strategies are implemented then this cost can be minimized and enterprise can be able to improve its process [134]. Effective inventory management practices. This is the best way through which companies can meet process efficiency target greatly. Companies are required to develop healthy relationship with the vendors so that they can deliver best quality raw material to firm

[135], [136]. This process improvement strategy helps in meeting the process efficiency target of service firms.

As per the view of six sigma is the service strategy in which companies focuses more on existing process and try to identify loop fall in existing process. This aids in knowing the improvement areas so that quality of existing process can be improved and firm can deliver best quality services to its consumers [53], [137]. Hotels always ensure to deliver quality goods and services to its customers. This cannot be possible in there is any kind of lop fall. Quality improvement strategy six sigma minimizes cost and enhance efficiency of current operational areas. By this way, hotels can deliver desired products and services to its end users who improves process of operation management and make the firm able to sustain in market for longer duration [138], [139]. Six sigma is quality improvement service strategy which always gives best outcome to enterprise.

#### 2.1. General Research Design



Figure 1: Conceptual Research Model

#### 3. DISCUSSION

Effective inventory management aids business in significant consumption of resources and delivering excellence services to buyers as per their requirements. Transparent communication and considering the actual need of stakeholders companies can improve its service strategy. By focusing on product type demand, involvement of suppliers and distributors firms can reduce cost of inventory and can utilize resources well so that needs of stakeholders can be met and firm can improve its service strategies. In order to preserve accurate service level in the COVID19 condition there is need to have effective management of inventory so that services can be delivered to users on time and its cost can be maintained otherwise enterprise will not be able to serve buyers well. In the recent time demand of bio-safety products is very high hence bio-safety companies are required to manage high demanded products and must improve global supply chain system so that services can be delivered top needed people on time.

#### 4. CONCLUSION

From the above research it can be concluded that service process improvement is highly depended upon the service strategy of company and management of inventory. Effective management of stock aids in minimizes wastage of resources and service strategy ensures improving quality. Both these elements help Service Company in improving service process significantly. Continual service improvement strategy is considered as great service strategy that enhances IT services quality and enhances satisfaction level of customers as well. There are many companies that fail to identify CSI activities. Therefore, it can be said that the owners and managers businesses develop the practice of inventory management by employing various scientific techniques, which can increase their level of competitiveness and organizational effectiveness by improving service process.

#### REFERENCES

[1] B. Kurdi, H. Alzoubi, I. Akour, and M. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022.
- [2] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [3] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [4] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [5] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.
- [6] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Dehost-live.
- [7] B. Al Kurdi, M. Alshurideh, and S. Salloum, "Investigating a theoretical framework for e-learning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, pp. 6484–6496, 2020.
- [8] M. Alshurideh, B. Kurdi, H. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," Uncertain Supply Chain Manag., vol. 10, no. 4, pp. 1191–1202, 2022.
- [9] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 42–63, Dec. 2021, doi: 10.54489/IJTIM.V1I2.17.
- [10] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [11] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [13] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [14] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [15] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.

- [16] B. Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. AlHamad, and H. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022.
- [17] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [18] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [19] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [20] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [21] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [22] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [23] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," 2021, pp. 235–247.
- [24] A. Akhtar *et al.*, "COVID-19 Detection from CBC using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 65–78, Dec. 2021, doi: 10.54489/IJTIM.V1I2.22.
- [25] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [26] H. M. Alzoubi, M. Alshurideh, B. A. Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022.
- [27] B. Al Kurdi, M. Alshurideh, and T. Al afaishat, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020, doi: 10.5267/j.msl.2020.7.011.
- [28] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [29] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [30] T. M. Ghazal et al., "Performances of k-means clustering algorithm with different distance

metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.

- [31] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.
- [32] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [33] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [34] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [35] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [36] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [37] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool: Examining the Influence on Female Cosmetic Purchasing Behaviour," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52– 74, 2021.
- [38] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [39] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [40] M. Alshurideh, R. M. T. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, no. 47, pp. 69–78, 2012.
- [41] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [42] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [43] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [44] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.

- [45] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [46] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [47] A. Alhamad, M. Alshurideh, K. Alomari, S. Hamouche, S. Al-Hawary, and H. M. Alzoubi, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429–438, 2022.
- [48] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [49] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V211.75.
- [50] M. Alshurideh, B. Al Kurdi, A. Abumari, and S. Salloum, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, pp. 210–222, 2018.
- [51] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 11, no. 1, pp. 67–78, 2022, doi: 10.1177/23197145211042232.
- [52] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [53] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [54] H. M. Alzoubi et al., "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [55] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.
- [56] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [57] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [58] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [59] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi:

10.1155/2022/8334927.

- [60] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [61] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [62] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [63] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [64] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [65] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [66] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [67] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [68] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [69] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [70] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [71] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [72] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [73] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.

- [74] T. M. Ghazal *et al.*, "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [75] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [76] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [77] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [78] Y. Ramakrishna and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag.*, vol. 15, no. 1, pp. 122–135, 2022, doi: 10.31387/OSCM0480335.
- [79] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [80] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [81] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/j.uscm.2021.11.006.
- [82] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [83] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.
- [84] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [85] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [86] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [87] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [88] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.

- [89] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [90] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [91] A. H. Alshurideh, M.T., Al Kurdi, B., Alzoubi, H.M., Sahawneh, N., Al-kassem, "Fuzzy assisted human resource management for supply chain management issues.," *Ann. Oper. Res.*, vol. 24, no. 1, pp. 1–19, 2022.
- [92] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 1–17, 2022.
- [93] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [94] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [95] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [96] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [97] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [98] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [99] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [100] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [101] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [102] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project

and Program Management: Utilization, Challenges and Opportunities," Am. J. Ind. Bus. Manag., vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.

- [103] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [104] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [105] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [106] S. Y. Siddiqui *et al.*, "IOMT cloud-based intelligent prediction of breast cancer stages empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 14649–46478, Oct. 2021.
- [107] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [108] N. Guergov, S., & Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," *Inf. Manuf.*, vol. 1, no. 1, pp. 1–17, 2021.
- [109] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [110] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [111] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [112] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [113] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [114] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [115] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [116] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J.

Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.

- [117] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [118] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020.
- [119] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.
- [120] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [121] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.
- [122] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [123] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [124] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [125] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [126] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [127] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [128] H. Alzoubi, M. Alshurideh, B. Al Kurdi, and M. Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 579– 588, 2020, doi: 10.5267/j.uscm.2020.2.005.
- [129] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [130] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, pp. 1–19, Sep. 2021, doi: 10.1155/2021/6262194.

- [131] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [132] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [133] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [134] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [135] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [136] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [137] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.
- [138] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [139] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.

# IMPACT OF INFORMATION TECHNOLOGY CAPABILITIES AND EFFECTIVE INVENTORY MANAGEMENT ON ENHANCED SERVICE DELIVERY IN HOSPITALITY SECTOR

Iman A. Akour<sup>1</sup>, Barween Al Kurdi<sup>2</sup>, Muhammad Turki Alshurideh<sup>3</sup>, Ahmad AlHamad<sup>4</sup>

<sup>1</sup> Department of Information Systems, College of Computing and Informatics. University of Sharjah, Sharjah 27272, United Arab Emirates E-Mail: iakour@sharjah.ac.ae

<sup>2</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>3</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>4</sup> Department of Management, College of Business, University of Sharjah, Sharjah 27272, United Arab Emirates. aalhamad@sharjah.ac.ae

## ABSTRACT

Organisations in hospitality sector to become agile are required to invest more in IT capabilities in order to obtain significant organisational capabilities and strategic processes. Through utilization of IT capabilities strategically and synergistically organisation in hospitality sector achieves alignment, adaptability and agility in long run. They make short term changes and makes organisation compatible to deal with uncertainties. IT adaption are made to adapt market changes and alignment is done to integrate IT capabilities with inventory management within organisation by strategic thinking for achievement of better performance.

Keywords: IT Capabilities, Inventory Management, Service Deliveries, Hospitality Sector.

## 1. INTRODUCTION

It is critiqued by Hospitality facilities can lag due to lack of information technology facilities within organisation operating in hospitality sector. For enhancing hospitality facilities and service deliveries information technology plays a vital role [1]. In order to achieve the aims of improved

service delivery and hospitality facilities the organisation identifies level of importance and satisfaction of hotel guest through application of IT capabilities. Different capabilities of IT can be used by hospitality organisation to improvise their operation, inventory management and profit maximization. Hotels and other organisation in this sector can use internet extensively for marketing function distribution [2]. This helps in generation and automation of service deliveries which enhance consumer experiences and thus their satisfaction level [3], [4].

Furthermore, global presence is also essential in order to enable both individual customers and the travel trade to access accurate information on availability and to provide easy, efficient, inexpensive and reliable ways of making and confirming reservations so that they can be provided with best services [5]. Moreover, with competitive advantage organisational performance gets better and through effective inventory management by using IT capabilities hotel organisation manages the stocks in their firm and gets to know better about consumer demand and preferences as well the requirement of inventory for particular times. The crucial role of IT capabilities and inventory management is investigated in this research to find the consequences of service deliveries.

#### 2. LITERATURE REVIEW

#### 2.1. Impact of information technology capabilities on effective inventory management system

As per the view of inventory management is crucial for every organisation and its determine the effectiveness of supply chain of the firms in hospitality sector [6]. Organisation operating in this sector has employed information technology information system within their organisational system in order to reduce the negative impact of bullwhip effect in supply channel [7]–[9]. Association between IT capabilities and inventory management implements a control at the organisational level in the supply chain. With use of different information technology capabilities the firms in hospitality sector have embedded effectiveness in the supply chain of the organisation like the supplier buyer relationship management, improvising inventory management and increased accuracy in demand forecast [10]. With appropriate information technology system applied within organisation inventory management gets improvised as need of both supplier and buyers are understood and accordingly strategies are formed in [11].

However, [12], [13] stated that Information technology capabilities have a direct influence on supply chain capabilities and inventory being a part of supply chain gets affected as well. With improved information technology system within organisations operating in hospitality sector information integration and operational coordination gets improved [14], [15]. IT infrastructure also has indirect impact on inventory management through IT assimilation and integration of the information through operational coordination [16], [17]. It is understood that with use and enhancing the IT capabilities within firms in hospitality sector inventory management becomes more effective. One of the features of IT capabilities is database management where data of client and suppliers are managed [18]. This aids in understating the supplier trend and consumer preferences where it can manage its inventory as per the upcoming requirement [19], [20]. Here organisation has access to relevant data and it uses the same in ordering the items in inventory or releasing them from warehouse to be used by clients [21]–[23].

On the other hand [24] have an opinion that Information technology has gained importance in recent times and has become a viable strategic policy option to be adopted by business organisation in hospitality sector. This has become essential in order to gain comparative advantages and dynamics information technology driven market [25]. Sometimes adoption of IT capabilities within organisation brings hindrance through challenges which indirectly reduce the benefits accruable on inventory management by information technology capabilities [26], [27]. The challenges that are faced by organisation within hospitality sector are related with cost of software which is a major problem in this industry and this cost affects the satisfaction level of consumer [28]. The organisation when apply Information technology software in its organisation the cost is implied on organisation [29], [30]. The management of hospitality sector in this context are required to ERP system which should increase efficiency and effective and affordable for inventory management and other operations in the industry [31]–[33].

As far as [34] are concerned use of information technologies in supply chain and hence in inventory management are used to achieve competitive advantages. IT has revolutionised supply chain for achievement of several benefits like increased efficiency and responsiveness. Information technologies are used to exploit and explore for inventory management innovation [35]. There are three dimensions of IT capabilities which have benefits inventory management that include: alignment, agility and adoption.

According to [36], hospitality sector organisation implements information technology for maintain the inventory management which plays a vital role and it is an important tool for enhancing the efficiency of supply chain management practices and product availability of the organisation [37]. Information technology capabilities are used by the organisation of this sector to generate awareness about the service and product availabilities and offers generated for them. Different IT capabilities like point of sale, management system, inventory management system helps in increasing the demand through effective inventory management [38]–[41]. For the purpose of integrated supply chain management approach in efficient performance of inventory management and availability of services IT capabilities are incorporated within organisational structure [42]. It is stated that through use of effective IT structure, software and hardware within organisation inventory management can be made more effective and is helpful in delivering effective services [43], [44].

#### 2.2. Impact of Information Technology capabilities on enhanced service deliveries

It is stated by [45]that major change in world economy from manufacturing to service oriented industry has come from application of information technology to service delivery [46]. Information technology is making continues efforts in enhancing effectiveness and efficiency in service delivery [47], [48]. IT capabilities within hospitality sector have diminished the cost of services and have created additional revenues from other services relation to organisation. It also helps in development of new services which add new value for consumer and create comparative advantage for the organisation in hospitality sector. Most of the service provider address advance service requirement through advance IT capabilities. Service oriented sector like hospitality sector gets assistance from IT oriented services in determination of direction in which the business with grow and develop in future. The diffusion and depth of technology has helped in accelerating the application and use of knowledge in different ways which are unimagined before 10 years [49], [50].

[51] stated that With use of information technology capabilities and organisation achieve competitive advantages by improvising consumer service delivery. One of element of IT capabilities is use of digital platforms and IT infrastructure in procuring innovative ideas for enhancing consumer services [52]–[54]. IT infrastructure uses different media to have positive impact on organisation's service providing ability [55], [56]. IT capabilities have a positive impact on innovation capacity and it fully regulates the relation between organisation performance and online media platforms use to develop innovations. This is stated that through use of IT capabilities of strong networking allow organisation to understand the consumer network they can approach

and also their needs and preferences [57]–[61]. With this they bring new innovative ideas in order to generate high consumer satisfaction level while delivering their services to them. With an effective database they develop and understanding over consumer preference, spending, visits pattern and other consumer behaviours so they services they deliver can be more efficient and consumer gets 100% satisfaction by services provided to them [62].

However [63] has an opinion that it information technologies capability has a direct impact on service innovation and on financial performance of the organisation. IT capabilities are radically related with incremental service innovation where it explores positively related services for innovation. IT capabilities influence service innovation through exploration and exploitation [64]. Basically IT exploration helps in development of innovative services which are based on new information and communication technologies [65]. Traditionally service innovation starts from user requirement for creation of new service while IT exploration starts from new available technologies and users are invited to create ideas for innovative services [66]. With user involved in development of new innovative service automatically the service delivery of organisation in hospitality sectors get enhanced amply [67], [68]. This means that innovate service through IT exploration capability helps in understanding actual consumer requirement, latest trends and other factor importance while delivering services to client. Thus, IT capabilities assist in development of innovative services which in turn enhance the service delivery capacity and effectiveness of the firm [69], [70].

On the other hand, [71]–[73] stated that to cope with dynamic business environment hotel industry is required to adopt and implement technologies with an aim of improving service delivery. Information technology capabilities help in wide coverage, attracting international as well as domestic guests, helps in making quick management decision which all invariable improvises the service delivery [74]. There are some factors which affects the effective use of information technology capabilities in improvising service delivery [75]. This includes high cost of IT gadgets, tax, internet fraud and privacy issues. these issues when handled carefully by hotel management the use of IT capabilities in hospitality services improvises the service delivery to a tremendous level where consumers gets the service of their need and wants without worrying about any security, privacy and fraud [72], [76]–[78].

#### 2.3. Impact of effective inventory management on enhanced service deliveries

As per the view of [79] effective inventory management is related with spending less on storage, to have less stock redundancy, reduction in amount of money invested in stock and improvising consumer services [80], [81]. Organisation in hospitality sector having firm grip on their inventory management increases the efficiency and service delivery. Inventory management is done through use of different software and system like SAP system, economic order quantity which in turn have a positive impact on the service delivery efficiency of the organisation [82]. SAP system controls the inventory effectively and efficiently which results in better performance and assist the organisation in better service delivery to its clients and fulfil their duties in best possible manner [83]–[85]. Inventory management done through SAP system enhance firm's performance in different aspect where all the consumer demand are met efficiently on time [86]. Also, when inventory management is highly influence by economic order quantity system where it affects the operational ability of the firm procurement performance which in turn amplifies service delivery of organisation in hospitality sector [87], [88].

On the other hand stated that in the current business environment, organisations are aware about the role of supply chain and inventory management for survival of the firm in hospitality sector and also to meet consumer demand [89]–[91]. An efficient inventory management is essential to ensure a timely delivery and service quality standards in the market [92]. Inventory management is done through various system and strategies which have an impact on service delivery of organisation. Some of the practices for inventory management used in this sector are just in time system, A-B-C- model and others. This models and system helps in managing inventories with supplier as well as within organisation. Inventory management has led to improvise the relationship between organisation in hospitality sector and suppliers and with this positive relation there is high product availability and enhance service delivery within organisation [93], [94]. Also for an effective inventory management to increase service delivery an efficient working capital management policy is also required for optimization of payment to suppliers and thus facilitate efficient delivery of service [95].

However [96] presented the opinion that inventory management is one of the greatest elements ensuring success of an organisation. There is indirect relation between effective inventory management and consumer satisfaction and enhanced service deliveries [97], [98]. There are different inventory management systems like, inventory control system economic order quantity, ABC analysis and when applied effectively within organisation leads to a higher consumer satisfaction by meeting their demand by analysing, handling and predicting the data in consumer friendly manner [99]–[101]. Inventory management system is used by organisation in hospitality sector to make a buy decision; inventory management system is used by firms to enhance demand, forecasting it and thus is able to meet consumer demand on time. With ABC analysis organisation optimizes the inventory and with EOQ optimal level of carrying and ordering cost is determined [102]. The inventory management system helps in lowering inventory holding cost and optimizes the stock which assist organisation in delivering best services on time to clients.

Conversably [103] stated that many organisations in hospitality sector fails due to poor planning and ineffective inventory management system . This situation can be handled through proper inventory management practices and the techniques thoroughly utilised for the benefit of the organisation [104], [105]. Automated systems coordinate the inventory management practices within organisation of hospitality sector and it enables in better demand management and reduces the storage space as well [106]. With effective inventory management system faster service delivery is ensured where consumer meets their demand on time and there is no or very less scope of dissatisfaction [107]. With inventory management being made effective services are delivered to guests in an effective, predictable, reliable and consumer friendly manner. In the hospitality sector inventory management assist in indirect manner where management of stock within organisation helps in effective service deliveries and enhanced consumer satisfaction [108], [109]. As per the view of, inventory management is a critical management issue for every organisation regardless of its type and size [110], [111]. It is identified that emphasis for inventory management must be given on EOQ and JIT system which enables the organisation in procuring sufficient qualities of the products required for delivering services within hospitality sector [112], [113]. With effective inventory management organisation can determined the material required in stock so that when consumer demands for a service firm do not get out of such product for delivering the hospitality services to its clients [114]. Also client data is used along with inventory management to forecast the demands and preferences and hence management can stock up more needed material to be used whenever required to fulfil the demanded services of guest in hotels [115].

# 2.4. Impact of Information technology capabilities and effective inventory management on enhanced service delivery in hospitality sector

As per the view of, investment made by hotel sector in information technology has become of vital importance. It is important for organisation to analyse the extent IT capabilities can make contribution in making its agile for responding to the change taking place in business environment and supply chain [116], [117]. IT capabilities ensure hotel agility along with effective inventory management. IT plays a medicating role through its capabilities where use of IT affects organisational agility, provide it direction and improvise the ability to manage technological resources as well. IT capabilities ensures effective management of inventory in hotels and thus both working together ensures that service delivery to clients are best and on time [118], [119].

On the other hand [120] stated that inventory management practices of a hotel firm have a direct impact on tis competitiveness and overall organisational performance in service delivery. A high and effective level of inventory management leads the organisation in enhancing competitive advantages through delivering services to consumers by analysis of relevant data provided via inventory management and IT capabilities [121], [122]. With competitive advantage organisational performance gets better and through effective inventory management by using IT capabilities hotel organisation manages the stocks in their firm and gets to know better about consumer demand and preferences as well the requirement of inventory for particular times [123]–[125]. This can be states that IT capabilities and inventory management in hotel sector are interconnected and have immense impact on each other and together they enhance the capabilities of organisation in delivering the services [126].

As far as [127], [128] are concerned there exists relation between IT capabilities and hospitality industry. Both have direct and indirect impact on each other. Benefits of IT assist hotel in managing the inventories and affects the organisational performance in positive manner. IT capabilities in the automate IT strategic industry do not shows a better business performance than in control firms. This means that with IT capabilities it cannot be ensured that all work get automated and no supervision is required [129], [130]. Hospitality sector is a service industry where overlooking every aspect of business is necessary thus when using IT capabilities in making inventory management more effective and enhancing service deliver proper supervision is necessary [131]. It is critiqued [132] that Information technology capabilities drives agility in hospitality sector. IT enabled capabilities improvises the operational process of the organisation thus provide

operational agility [133]–[135]. IT capabilities enable three capabilities within organisation which are localised, synergistic and optimised coordination of resource interdependencies [136]. Resource interdependencies are created through effective inventory management which deliver effective sensing and response mechanism where consumer are provided on time services as per there demand and preferences and with incorporating latest trends as well [137]–[139]. This means that IT capabilities and effective inventory management system within hospitality sector works together in providing relevant data too organisation where it is carefully handled and analysed to determine consumer behaviour and pattern in order to serve them with best services.

#### 2.5. General Research Model



Figure 1: conceptual Research Model

## 3. DISCUSSION

The hotel industry's investment in information technology has become crucial. It is crucial for organisations to assess how much their IT capabilities can help them become more adaptable to changes in the business environment and supply chain. Effective inventory management and hotel agility are both guaranteed by IT capabilities. Through its capabilities, IT performs a healing function by influencing organisational agility, giving it direction, and improving the management of technology resources. When IT skills and inventory management capabilities work together to provide successful inventory management in hotels, clients receive the finest service possible on

time. Through the provision of services to customers and the analysis of pertinent data offered by inventory management and IT capabilities, an organisation with a high and effective level of inventory management increases its competitive advantages. Through effective inventory management employing IT capabilities, hotel organisations may better understand consumer demand and preferences as well as the need for inventory at specific periods. Competitive advantage improves organisational performance. This can be interpreted to mean that IT skills and inventory management in the hotel industry are interconnected, have a significant impact on one another, and together they improve an organization's ability to provide services.

#### 4. CONCLUSION

Information technology capabilities in hotel sector plays a vital role in knowledge management. IT structure, IT human and IT relationship are three attributes of IT capabilities which are used in hospitality organisation for managing inventory in both effective ways as well as enhance the organisational performance and service deliveries. There is direct relation between IT capabilities and inventory management for hotel sector which states that IT capabilities improves inventory management which enhances business operation and create consumer valuation and evolve the service delivery system of the organisation. Through using IT capabilities supply chain of the firms are made effective which in turn make sure that consumers are provided with the services according to their want which enhance consumer experience and consumer satisfaction.

#### REFERENCES

- [1] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 12, no. 1, pp. 55–68, 2021.
- [2] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.
- [3] B. Kurdi, H. Alzoubi, I. Akour, and M. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022.
- [4] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [5] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.

- [6] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [7] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [8] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, vol. 4, no. 2, pp. 1–15, 2020, doi: 10.1080/10494820.2020.1826982.
- [9] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [10] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [11] B. Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. AlHamad, and H. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022.
- [12] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [13] B. A. Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [14] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [15] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [16] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [17] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.

- [18] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [19] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [20] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," *J. Mark. Commun.*, vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [21] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429–438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [22] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [23] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.
- [24] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [25] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [26] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [27] B. Al Kurdi, M. Alshurideh, and T. Al afaishata, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020.
- [28] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [29] Y. Ramakrishna and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag.*, vol. 15, no. 1, pp. 122–135, 2022, doi: 10.31387/OSCM0480335.
- [30] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561–

3570, 2020.

- [31] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [32] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [33] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [34] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/j.uscm.2021.11.006.
- [35] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [36] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [37] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [38] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [39] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 1–17, 2022.
- [40] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [41] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [42] M. Alshurideh, R. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 12, pp. 69–78, 2012.

- [43] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 18–32, 2022.
- [44] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [45] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [46] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [47] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [48] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [49] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [50] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [51] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship: A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [52] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [53] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [54] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," 2021, pp. 235–247.
- [55] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.

- [56] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [57] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," *J. Leg. Ethical Regul. Issues*, vol. 24, no. 1, pp. 1–12, 2021.
- [58] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [59] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- [60] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [61] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [62] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [63] A. Akhtar *et al.*, "COVID-19 Detection from CBC using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 65–78, Dec. 2021, doi: 10.54489/IJTIM.V1I2.22.
- [64] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [65] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [66] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [67] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," *ENLIGHTENING Tour.* A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [68] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [69] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [70] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with

Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.

- [71] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [72] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [73] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [74] A. ALnuaimi, M., Alzoubi, H., Dana Ajelat & Alzoubi, "Toward Intelligent Organizations: An Empirical investigation of Learning Orientation's role in Technical Innovation.," Int. J. Innov. Learn., vol. 29, no. 2, pp. 207–221, 2020.
- [75] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [76] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020.
- [77] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 1–13, 2021.
- [78] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [79] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [80] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.
- [81] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [82] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [83] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and

its effect on strategic innovation in Jordanian universities," Int. J. Bus. Excell., vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.

- [84] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [85] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," Am. J. Ind. Bus. Manag., vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [86] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [87] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [88] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [89] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [90] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [91] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [92] H. Alzoubi, M. Alshurideh, B. Al Kurdi, and M. Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 579–588, 2020, doi: 10.5267/j.uscm.2020.2.005.
- [93] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [94] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [95] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [96] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 42–63, Dec. 2021, doi: 10.54489/IJTIM.V1I2.17.
- [97] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian

entrepreneurship theory: Evolution and relevance," Acad. Entrep. J., vol. 25, no. 4, pp. 1–10, 2019.

- [98] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [99] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [100] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [101] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [102] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [103] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [104] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [105] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redibw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Dehost-live.
- [106] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [107] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," Int. J. Bus. Innov. Res., vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [108] T. M. Ghazal et al., "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [109] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.

- [110] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [111] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [112] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V2I1.75.
- [113] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," Int. J. Appl. Inf. Syst., vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [114] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [115] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [116] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [117] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [118] H. M. Alzoubi *et al.*, "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [119] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [120] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [121] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [122] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [123] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.

- [124] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag.* (*IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [125] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [126] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [127] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [128] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [129] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [130] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [131] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [132] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," Int. J. Technol. Innov. Manag., vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [133] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [134] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [135] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, pp. 1–19, Sep. 2021, doi: 10.1155/2021/6262194.
- [136] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [137] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing

Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.

- [138] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [139] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.

# THE IMPACT OF LEAN PRACTICES AND AGILE PRACTICES ON PROCESS QUALITY

Ali A. Alzoubi<sup>1</sup>, Muhammad Turki Alshurideh<sup>2</sup>, Iman A. Akour<sup>3</sup>, Barween Al Kurdi<sup>4</sup>

<sup>1</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

<sup>2</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>3</sup> Department of Information Systems, College of Computing and Informatics. University of Sharjah, Sharjah 27272, United Arab Emirates, iakour@sharjah.ac.ae

<sup>4</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

## ABSTRACT

Finding the best lean and agile practices to enhance the effectiveness of the filling process in the manufacturing companies is the aim of this research. Lean agile seeks to minimize inefficient processes and tasks for increased effectiveness and lower costs never compromising on quality. In reality, lean agile places a high priority on giving the customer value with every decision. Lean agile, a development methodology, helps teams to identify waste and streamline processes to raise the firm's process quality. This research is aiming to provide the investigated evidences to provide the impact of lean and agile practices on process quality.

Keywords: Lean, Agile, Process Quality

# 1. INTRODUCTION

Providing value to the customer with every decision is actually given top importance by lean agile. Teams can expose waste and streamline processes with the use of the lean agile development methodology, which helps to raise the firm's process quality [1], [2]. Agile and lean manufacturing have been proven to be efficient methods for achieving these objectives. Agile manufacturing seeks to adapt to quickly shifting markets, intense global competition, shorter time to market for innovative products, and higher value for information or services [3]–[5]. The agile method has

one of the biggest opportunities to implement in process of business operations that it has quality to give quick response to the team members to get knowledge about the product need, success, and improvement, how it is working and how much it is required in market before it goes late [6]–[8]. It also creates feedbacks on time that are also helping for management to take rapid decision regarding quality control of the organization [9]. There are two main strategies appointed as mandatory for a quality management and cost effective manufacturing. This research is focused on assessing the impact of lean and agile practices on process quality management.

#### 2. THEORETICAL FRAMEWORK

#### 2.1. Impact of Lean Practices

[10] evaluated Agile process and lean processes are two known methods of management sciences and project development sector that helps to company and managers to deliver faster and sustainable outcomes for the businesses [11]–[14]. The both processes are most popular methods especially in software designing and development sector where the process also helping to practices to reviewing data that is previously associated with business lean reporting system [15], [16]. We usually seeing that most of the team members are using both methods at the same time but still they are confused between the differences of agile and lean process method in operational process of management [1], [17]–[19]. The method is simple including with the process of in which agile method of developmental process is usually used for rapid software delivery that is associated with many lean principles [20]. The global business industrial success is depending on its specific operational processes [21], [22] and developments that are implementing by the management of the companies and these managements are keen to organize the ability to deliver fast and rapid result oriented operational tasks for their employees and customers [23], [24]. The agile and lean process of management also given the structure to the organization for its businesses to find better ways to create high quality product services for customers and stability to promote the organizational culture in business settings. There is no success can be seen in business organizational process of management if there is no any process of management is implemented [25], [26]. The traditional corporate structure of the organization only depending on the business structures and its fast -delivering services [27]. Currently business organization are adopting faster, moving and smart efficient methods that are managing the high- growth of the business revenues

and reputation in market [28]. The lean process of method describes the set of knowledge to the project management teams in which they are specifically named Lean Management [29]. It is a less time taking method that eliminating the wastage of time and unnecessary task of the business steams [30]. The lean method of process management is a set of behavior that is helping to team members to eliminate all wastages of the documents, unnecessary meetings and many other activities that are not relevant to the tasks of the business [31]–[33]. Simply, lean method of process eliminate all that process which is not important to add value [34]. Lean methodology of the project and management also helping to team members to create efficient working task to achieve goals through direct method [35]–[37]. The lean method of the management taking decision in which they involved all team members to ensure the optimizing solutions for business [38]-[40]. The lean method of management and process of operations empower the individual and team members to get effective and trusted ways to create solutions for projects and implement strategic planning of the resources in limited period of time without unnecessary tasks of the business operations [41], [42]. Lean method providing rapid decision for production -based solution in which they clear the intention of the customers and demand according to supply and need in the market [43], [44].

#### 2.2.Impact of Agile Practices

In the words of [45], the lean method and agile method of process of operations in business almost same in their practices but agile methodology of the process of management refers to a set of values and principles of the business core vision [46]–[49]. The agile methodology of the business practices creating the knowledge- based supervision of the management and team members of the business in which they can easily differentiate the intentions of the future goals and outcomes through developing interaction of individuals and tools that are required in operational process [50]–[52]. The agile method also helping to employees to get clear knowledge about the operational requirement of the business and manufacturing needs of the products in development process via tools and functions [53], [54]. The agile method also can create the efficient collaboration among the customers of the business that are given potential revenues to the products of the companies [55]–[57]. The agile is a strategic form of decision -making process in which it helps to negotiate with the customers and stakeholders of the business in market for certain required limitations [58]. The method also creating the potential information that is related to business process and its future development projects that are needed to implement [59], [60]. Agile

process of operational success has an optimistic method of working and managing the operational stuff of the business on- time when it is need for rapid decisions [61], [62]. The method providing the quick response according to its required change and needs [63]-[65]. The paid action for the planning and development of the project only could be possible with the agile methods. The similarities between lean and agile method of the process is quite same according to its functioning and rapid response but still agile methodology of the process of management focusing on the development rather it is focus on only production [66]-[68]. The agile method creates the designing and development of the software teams because it is less time taking, time focused method and helping to achieve continues success in business operations and value of services [69]-[71]. The aim of development of agile methodology in software practices and information system of business solutions to build far easy practices and avoid huge method of planning and developments of the projects that is very difficult in previous years [72]. The software development teams are preparing the business practices more efficient rather before decades [73]-[75]. The agile methodology creates the flexibility in the operations, customer retention and relationship management through rapid product services and their adaptability in markets [76]. The agile breaking the huge and long process of management into small and easy working process that are more frequent in the operations and giving ultimate results [77], [78].

#### 2.3. Impacts of Agile process on Lean process

In the words of [79] the agile process and lean process in operations, both are important for development of the process of management and business outcomes. Currently the both processes and the methodology of their operations are highly become the need of business in global industries. [80]–[82] identified both methods are the essential demand of the fields and industries due to their flexibility in actions [83], quick responsiveness, end- user- focused method that is helping to team of the management to build effective product quality and services for its customers [84], [85]. This is providing substantial ways for decisions to take for business [86], [87]. The methods also goal oriented philosophy of the business that create the high- quality products quickly [88]. Both methods are almost same in their practices and applying parallel in business industries where the operational tasks required huge planning and development [89]–[91]. Agile method is one of the software developments IS solution for businesses in which business industries applying and managing the agile methodology rapidly and accepting its requirements for business essentials [92], [93]. It is a core invention of the previous decades when the inventories management and

business operational tasks was doing manually and taking months and years to resolve the issues and management of the data [94], [95]. The agile method of operational process is one solution for all. It is providing best software solutions in which management and teams of the businesses create manufacturing methods to production and sales in market [96]–[98]. The agile has ultimately goals to create developing success in business outcomes rather lean process [99]. Agile is flexible, providing rapid actions towards the issues and frequent business solution provider for irritations in business [100]. Agile implementations focusing on features repetition with a specific technique in which every repetition or iteration is clearly defined [101], [102]. It is a working software that is directly helping to achieve business goals through planning and project team intentions [103]. The business organizations Information technology (IT) departments are usually using the agile methodology in their operational processes but still it has confusing among the team members whether they are using and scale the lean or agile for consistent practices of the business organizations. Agile is the process of functioning that is quite effective for team functioning process [104], [105]. There are certain values that prefer the agile methodology on lean process of management, such as [106]:

- Agile has ability to create its customer satisfaction through product availability and its services in market
- It is helping to change new requirements in business operational processes
- It can provide efficient delivery of the software outcomes in business relevance
- Agile methodology helping to business corporations to integrate frequently through one unit of software practices
- Agile also can measure progress of the business operations and its successful outcomes
- It is simple and has sustainable development objectives for businesses
- Agile can provide direct communication and building the commercial relationship management between project development team members and stakeholders
- Agile helping to organize the teams of the organizations and create regular interaction with adaptation [107], [108].
## 3. LITERATURE REVIEW

# 3.1.Impact of Lean practices and Agile Practices on Process Quality

[109], [110] stated agile process and lean project both are most popular methods of project management industry in business organizations around the world. the methodologies of the both processes helping to organizations and project development teams to create faster, rapid growing, and sustainable outcomes development in short period of time [111]–[113]. The similarities are often not clear between both methods but both processes are helping to managing the industries at small to large scale [114]. Both processes and methodologies have essential benefits on process quality management of business such as lean method effectively differentiate the need and demand of the market and always prefer production on the basis of demand rather not on supply [115]–[117]. The lean method of process is highly keen to develop and interest of the customers. The method only focusing on the demand of the objects and then ready the manufacture outcomes [118], [119]. The lean method of process is one of the essential planning and strategy of the project management team that is seeing on future policies of the business and design products only the basis of demands [120], [121]. The lean method never insisting the teams to create products that has not sufficient intention to get in market [122], [123].

The lean method has concern with performances of the small lots and avoid economic of scales [124]. It is little time taking process of management in which the production takes time to create the efficient products of the services for better quality management. Employers are responsible to take decisions for all implementations and managers and other team members are not answerable for any decision [125], [126]. The lean process helping to workers to create efficiency in their tasks for better process of quality in business through improvement of the performances [127], [128]. While agile has another way of business and its operational management as compare o little similarities of the lean process [129]. The agile practices creates the interaction between employees and their operational tasks management in which all essentials are included from operations to functions [130]–[132]. The process has great opportunity to define the rapid change in the plan and collaborations with potential outcomes through negotiations [133], [134]. Agility create the highest priority of the customers of the business and taking as a potential benefit for successful outcomes and directly working on software development of the IS solutions for business in which the system frequently helping to upgrade the process of management and its quality assurance

[135]. The method always encourages the change and adaptability of the global business standards and its requirements [136]. It helps to create effective communication system among organizations and stakeholders in market. It has capacity to build sustainable business results through excellent and simple ways of working [137], [138]. The agile process of method in business firms focusing on continues variances in software operations and their iteration with technical assistance and excellence [139]. The business organizations understand the need of development of the agile methodology in business that is less time taking and providing ultimate goals of the businesses.

### 3.2. General Research Model



Figure 1: Conceptual Research Model

# 4. DISCUSSION

The above evidences from prior literature and research sources enabled to justify this research and conceptual model mentioned in figure 1. It can be said that, adding resources and buffers, outsourcing, and extending the use of the current machine are all examples of agile techniques. Whereas, lean manufacturing, uses the benefits of mass production in conjunction with the concepts of just-in-time and waste removal (non-value added activities) in order to lower overall production costs. Lean procedures, which include buying new machines and doing rework, put a focus on cost reduction by improving quality. Leagile, often known as a combination of agile and lean principles, may be appropriate in practice. Lean and agile strategies are combined in the

leagile idea, which enables quick reaction to fluctuating demand and maximizes cost, time, profitability, and improve the process quality.

# 5. CONCLUSION

The agile and lean practices in business operations is one of the procedures that are helping to business organizations to create their working efficiency is quicker as compare to previous decades. This approach always promotes modification and flexibility of the requirements and international business standards. Leagile aids in the development of a successful communication system between businesses and market participants. It has the ability to create lasting corporate results through effective and straightforward working methods with high quality production. The use of leagile practices by business organizations to focus on ongoing variations in software operations and their repetition with excellence and technical support.

### REFERENCES

- T. M. Ghazal *et al.*, "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [2] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [3] H. M. Alzoubi *et al.*, "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [4] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [5] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [6] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [7] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.

- [8] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [9] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [10] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.
- [11] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [12] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [13] B. A. Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [14] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [15] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 42–63, 2021.
- [16] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [17] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [18] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [19] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [20] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [21] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [22] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai

Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," 2021, pp. 235–247.

- [23] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [24] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [25] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.
- [26] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [27] B. Al Kurdi, M. Alshurideh, and T. Al afaishat, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020, doi: 10.5267/j.msl.2020.7.011.
- [28] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [29] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [30] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [31] H. Alzoubi, M. Alshurideh, B. Al Kurdi, and M. Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 579– 588, 2020, doi: 10.5267/j.uscm.2020.2.005.
- [32] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [33] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [34] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [35] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," Int. J.

Comput. Inf. Manuf., vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.

- [36] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [37] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [38] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [39] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [40] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [41] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [42] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [43] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [44] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [45] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [46] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [47] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [48] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [49] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [50] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.

- [51] M. Alshurideh, R. M. d. T. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 47, pp. 69–78, 2012.
- [52] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [53] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [54] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [55] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [56] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [57] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [58] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [59] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [60] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [61] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020.
- [62] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [63] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [64] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," *J*.

E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110-118, 2021, doi: 10.20368/1971-8829/1135556.

- [65] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [66] A. ALnuaimi, M., Alzoubi, H., Dana Ajelat & Alzoubi, "Toward Intelligent Organizations: An Empirical investigation of Learning Orientation's role in Technical Innovation.," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2020.
- [67] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [68] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [69] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [70] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [71] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [72] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [73] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [74] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [75] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [76] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [77] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [78] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V2I1.75.

- [79] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [80] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [81] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [82] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [83] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [84] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.
- [85] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [86] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [87] M. Alshurideh, B. Al Kurdi, A. Abumari, and S. Salloum, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, pp. 210–222, 2018.
- [88] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [89] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [90] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [91] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [92] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [93] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [94] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," *J. Open Innov. Technol. Mark. Complex.*,

vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.

- [95] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [96] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [97] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [98] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [99] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [100] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [101] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [102] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [103] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [104] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [105] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 1–17, 2022.
- [106] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [107] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429– 438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [108] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi:

- [109] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.
- [110] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [111] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/j.uscm.2021.11.006.
- [112] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [113] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [114] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [115] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [116] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [117] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [118] M. Alshurideh, B. Kurdi, H. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, 2022.
- [119] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [120] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [121] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1–

10, 2019, doi: 10.4236/ib.2019.111001.

- [122] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [123] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [124] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. Alhamad, and H. M. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022, doi: 10.5267/j.ijdns.2022.7.006.
- [125] R. Yanamandra and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag. An Int. J.*, vol. 15, no. 1, pp. 2579–9363, 2022.
- [126] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [127] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [128] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.
- [129] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [130] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.
- [131] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, pp. 1–19, Sep. 2021, doi: 10.1155/2021/6262194.
- [132] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [133] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [134] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Dehost-live.

- [135] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [136] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [137] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 12, no. 1, pp. 55–68, 2021.
- [138] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [139] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.

# IMPACT OF EFFECTIVE ORDER MANAGEMENT AND USE OF INFORMATION TECHNOLOGY IN SERVICE OPERATIONS IN ENHANCING SERVICE QUALITY LEVEL IN HOSPITALITY INDUSTRY

Muhammad Turki Alshurideh<sup>1</sup>, Hevron Alshurideh<sup>2</sup>, Ali A. Alzoubi<sup>3</sup>, Barween Al Kurdi<sup>4</sup>

<sup>1</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>2</sup> Department of Foreign Languages, Faculty of English Language and Literature, The University of Jordan, Amman 11942, Jordan, Hevronalshurideh@gmail.com

<sup>3</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

<sup>4</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

## ABSTRACT

In Hospitality industry, to maintain consistency, not every customer receives the same degree of treatment. Truly good customer service requires personalization and making each client feel as though they are the only ones who count right now. That is the phenomenon to successful hotel management, better order management with time effective way by adopting technological strategies can enhance the service quality. The objective to this research is to explore the impact and factors affecting service quality in the hotel management.

Keywords: Order Management, Information Technology, Service Quality.

### 1. INTRODUCTION

Information technology innovational approaches brought a big changes in the industrial sectors by replacing paper with the latest kind of digital technology solutions which eventually resulted in increasing transparency, lowering the operational costs and improving customer satisfaction. It is significant for the company to adopt enhanced types of order management systems that allows them to gain high return and values from their work [1]–[3]. By the use of IT in managing the orders and inventory of the business that eventually reduces the complexity, provide solutions and ensure reliable supply structure for the organisation at the global level in the marketplace [4].

Even though the hospitality industry is among the oldest globally, it shouldn't come as a surprise that, in the current world, integrating modern technology is the only way for hotels to operate at their peak efficiency [5], [6]. Hotel management software, such as property management systems (PMS), is being quickly adopted, according to reports by Software Advice, to streamline the check-in and check-out process, generate financial reports, manage staff, and automate daily tasks [7]. This saves time, frees up the hotel staff from more laborious duties, and enhances the guest experience and also helps to manage the orders in efficient way. Therefore, this research was mainly aimed to explore the impact of IT and order management on service quality.

# 2. THEORETICAL FRAMEWORK

## 2.1. Impact of effective order management on use of IT in service operation

As per the perspective of [8] an effective order management is the most convenient and innovative feature for the businesses to manage, control and monitor all of their functions and operations in a structured manner. This modern technique of the business helps them organizing their routine, upcoming and on-going orders and processes that are to be delivered and executed on time to their clients [9]–[11]. It allows them to share entire information on a platform from which the rest of the management and team members can be notify for their part of task [12]. In their studies, it has been determined that the latest technologies in the sector have supportively assisted the service industries in maintaining high standards and quality while delivering the products [13]. With an aim of getting better results and feedback from the clients most of the service operations are performed before deadlines [14], [15].

From the learning of [16], this has made a clear representation for the use of Information Technology (IT) in the service oriented businesses. The study has explained about the benefits of adopting system for gaining proper ways to implement and complete the assigned task [17]. It is claimed that the advancement in the technological structure and software of the business is the key factor to determine their overall success and efficiency in administrating and accomplishing their functional approaches in a better manner [18]–[20]. The latest upgraded technology and configurations has identified new kind of solutions for order processing and benefitted both the aspects which are customers as well as suppliers [21], [22]. The technical sources of IT sector has provided more accurate and faster order processing methods to the industry and also offered

them the option of getting tracking information of the orders to ascertain the status of the progress [23], [24].

Moreover, a research of [25] has highlighted the link between both the factors in a wider form which shows up a conceptual understanding about order management process and use of IT in managing the flow of operations [26]–[28]. The latest feature of order management allows the employees and managers of the organisation to develop a proper strategy of task completion within the stated time and gives them the benefit of maintaining excellence in the functionalities [29]. It is essential for a service based company to perform the set activities in a professional manner to build trust and loyalty among the customers [30], [31]. For this, the order management program provides the facility to their employees to record and track the entire work at various stages of fulfillment and completion [32]. The software used for order management offers the business to maintain a database which can be accessed by them anytime with the credentials. It allows the management team members to store the data and records of their clients for evaluating details about payments, ordered and issues (if occurred) [33], [34].

As per the perspective of [35] the inventive technology facilitate the company to make proficient decisions whenever required, for example, if the customer has ordered a product via website than every department of the management will be notify by the system. The estimated time and available duration gets automatically divided among every stage of task completion and informed to the section by the system [36], [37]. During this procedure, in case of error generation the software automatically informs about the same to every department and place the solution as well.

# 2.2. Impact of effective order management on service quality level

According to the learning of , which explained the factors responsible for developing the areas of order management that makes is more profitable for the company in upholding their level of service quality [38]. It is necessary for the modern organisation to identify, select and implement the best form of order management system in their business in order to accomplish the desired goals [39], [40]. The order processing feature in the latest structure helps the organisation in promote customer satisfaction rank in the marketplace. Such kind of management systems are considered to be designed for monitoring order completion flow, product availability, scheduling purchase order and identify the dead stock or unsold product [41]. In order management process, the system makes sure that the right order is placed to the right customer within right time. In the studies, the author

evaluated that order management functions improves the loyalty among the customers by delivering high quality and performance in their products and services ordered by the clients [42]. Moreover, the further discussion information was evident from the explanation of , which briefly elaborated the benefits of adopting order management approaches in the service based company like hotels, restaurants, e-commerce websites, etc [19], [43], [44]. All of such sectors use order management practices, activities and facilities to handle and deal with the regular bulk purchase made by the online as well as offline customers [45], [46]. These types of company's daily addresses bulk orders from the clients so it is significant for them to utilize best order management program which controls and monitors the supply chain, logistics, inventory and delivery features [47], [48]. It starts with the order placement and ends up with delivering the product or service by continuing the high performance level at every stage [49]. The main aim of order management in the company is to balance the ratio between overstocking and under-stocking so that the business must avoid the situation in which they are unable to dispatch the right and accurate outline of product to their customer [50]–[52].

The research made by [53], defines that any mismanagement done in the orders creates issues for the business in continuing its operation for long time period [54]. The quality service can be easily delivered by order management as it avoids making mistakes while fulfilling orders, developing base for the information for making data driven mistakes, wasting less time, etc [55], [56]. It is vital for the companies to support the structure of quality in their employee's performance, for this they must motivate, teach and instruct them to deliver the preferred form of routine service [57]. In that case, order management process assign every employee their job description and task which are to be accomplish by them within available resources, time and team members [58]–[60]. This allows the organizational individuals to know their share and part of duty at every stage of order processing and providing services in an effective manner [61].

Contradicting to this information, the study of explained some different perspectives on the stated topic that has strong points to be considered for understanding the actual practical facts and aspects [62]. It depicts that order management has no relevance with the advancing the quality level of the services, however, it all depends on the employee's performance that gives boost to the customer satisfaction [63]. The study determined that an employee's behavior, set of actions and treating abilities define the service quality of the company [64]. In the modern times of

branding and promotional techniques, the company mainly focuses on giving luxurious, comfortable, pleasure and price worthy feelings to their customers [65]. They have belief that to raise loyalty and trust among the customers, the company must focus on improving the structure of delivering high class conduct of work and presentation [66], [67]. However, the order management system is just a process that provides a kind of production cycle to the company which is to be followed by the team to finish the order on time[68].

Besides this, exploration of [69] furnished some real facts towards the topic which shows up new areas of learning to evaluate the impacts [70], [71]. The order management system avoids the user to make any mistakes and delays in placing the right order to the customers [72]. With the facility of managing the orders in the company, the staff members are assigned with the duty of uploading and submitting actual information in the system so that errors and mistakes can be avoided and rectified at the same time [73], [74]. The process of order management assists the staff members in conducting a proper way for accepting the returns made by the customers and schedule the refund process [75]–[77]. It improves the quality level of services and develops the customer loyalty among their regular clients.

### 2.3. Impact of use of IT on boosting service quality level

From the investigation of [78], in which the explanation of technology and advancement in the industrial sector was briefly elaborated, that summarized the link between IT and quality service [79]. It is essential for the company to adopt and use the best suitable technological features, software and equipment's which allows the users to furnish the high quality functions and operations to their clients [80]–[82]. In the era of globalization, the regular day to day upgradation in the technical fields and structure gives the benefits of identify the better ways to attract the attention of the customers [83]. It is essential for the employees to synchronize themselves with the available technology features and facilities that are directly linked with the company efficiency in building better ways to gain revenue and return [84]. Although, the changing IT specifications in the sector mostly disturbs the working ability of the company and disables them to furnish quality services to their customers, but, with implementing some critical modifications in the system the company is able to accept the program [85], [86].

In addition to this, the learning of briefly concluded about the IT division of the company, in which they positioned the department as a key role player [87]. The main aim of IT section is to

offer new and easy methods to the company to manufacture the product and deliver the service as preferred and liked by their existing customers [88], [89]. It is makes it easier for the business and their team members to allocate the most effective path which is to followed by them in order to achieve the goals and targets determined. The challenges in form of competition, pricing, product return, demand and supply, etc. are the factors that influence the overall performance of the company and eventually their efficiency in delivering quality services to the clients [90]. In that respect, the advancement in the technical guidelines and programs of the organisation allows them to encounter any issue which could reduce their profitability and customer satisfaction achievements [91], [92].

In the research of [93], [94], it was comprehensible enlightened that the regular updating improvement in form of continuous innovation, profitability for the business has gone up [95]. Many companies are fighting for gaining high competitive advantage which can be attained by boosting quality in their operational and functional activities [96]–[98]. In a society of established market, the majority share of it depends on the consumers whose diversifying needs in the segment plays a significant role in changing the overall working and earning capacity. With the help of IT, the company can expand and advance the level of economy by buying and using the software which is mainly oriented towards and trending for service industries [99], [100]. For instance, an individual would generally prefer booking hotels which has higher number of positive reviews, amenities and features that gives comfortable stay to him [101]. For this, the hotel management team would aim on maintaining best ways of room service, food service and others.

In the recent observation of [102], [103], they provided facts that IT sector has the ability to bring sudden changes in the system and give the competitive advantage to the organisation and attract huge amount of audience by offering them the most preferable goods and services [104]. It helps the organisation in sorting out the valuable feedbacks and reviews of the customers, which are due to the poor performance of the staff and company [105]. A business should always assess the negative comments of their customers placed on technical grounds like social media platforms, room assistance made, service demanded and delivered, etc.

#### 3. LITERATURE REVIEW

# 3.1. Impact of effective order management and use of IT in service operation on enhancing service quality level

From the study of [106], it has been ascertained that an effective order management technique has the most relevant role with the use of technologies for boosting the level of quality service delivered among the customers. Both the functions helps the service oriented company to place valuable ways to enhancing service quality in the marketplace. This ensures the raising of profitability and branding for the organisation, as it is important for them to built a strong market image in the eyes of their targeted audience so that more of the marketplace gets attended by them [107]. In the viewpoint of the writers, professional order management system involves standard changes and up-gradation on regular basis which ultimately supports the team in developing better ways to overcome the demands of the customers by placing the most preferred and unique product and service [108]. By this, the company make surety about their capabilities of the delivering the high quality services in the marketplace [109], [110].

The research made by [111], has a different views on the topic as compare to the above authors, as the study determined that both the system are compelling on their own but has diverse framework from each other. Technologies in the service sector are only enclosed with taking orders and processing them in perfect state [112], [113]. Moreover, the entire quality management feature is directly depending on the employee's ability, skills, talent and knowledge which are to be used in processing the orders placed by the customers [114]. It also showed that the company must focus on managing the process of order placement and use the technology to record and store the information about the same [115], [116]. The company usually pursues a structure determined by the higher authorities while completing the order and it is necessary for the members to fulfill the entire instructions specified in the outline [117].

As per the perception of [118] which clarifies a wide conceptual understanding towards the topic helped to generate values in-depth of the subject [119], [120]. They specified that the modern updates in the order management system are highly effective and it is all due to the technical support which has facilitated many industries in promoting their functioning and quality in the services [121], [122]. In the latest software of order management, an employee can easily insert,

edit, store and update data on routinely which is timely notified to the every other relevant department so that in case of bulk orders the company could avoid failures, errors and mistakes in processing the order [123]–[126]. For example, a restaurant generally manage all its raw material in the store house and records it in the system so that at the time of getting the order [127], the chef can easily assess the quantity and amount available and checks for remaining availability of the raw materials [128]. This feature helps the restaurant to handle all the orders on a single platform and deliver it on estimated time [129], [130].

In the article of [131], [132] which effectively highlighted the areas and facts that provided brief information about the topic. It is summarized in the study that the quality of the services depends on the employees and their company's competency in managing the flow of production and order placement [133], [134]. Any delays in the entire procedure develops bad reputation for the organisation which require proper framing, planning, controlling and executing of the tasks [135], [136]. This can only be possible with the help of novel and inventive order management techniques or systems [137]. With the use of IT and effective order management, the company is able to schedule the entire work and assign every employee their task with required favorable output. However, the explanation of [100], [138] was contradicting the above study and added more information in the subject matter. It stated that depending on IT factors for managing the orders could lead to drastic results [139]. As the values are generally uploaded manually in the system and rest of the staff would believe the mentioned data. Thus, any negligence in feeding up the information in the order management system has higher chances of getting negative impacts on the quality level of services.

### General Research Model



Figure 1: Conceptual Research Model

## 4. **DISCUSSION**

This research evaluated critical details about the topic in which it can be said that IT factors and framework is only limited up to certain extent and has partial support in boosting the quality functioning of the business. The research clarifies that technical fields, systems and equipment in the company are majorly used to accomplish the assigned work. It only helps the employees to finish the work on time; however, the quality of the services has nothing related to it. This assessment changed the entire viewpoint towards use of IT in enhancing the service quality, and added new perception in the subject matter. It stated that the process of maintaining aspects of the services and products in the manner which are highly preferred and liked by the buyers. In this process, IT is responsible to preserve communication, production, routes of system and everything related to the technical phases.

### 5. CONCLUSION

The research findings can be concluded as, the quality service can be easily delivered by order management as it avoids making mistakes while fulfilling orders, developing base for the information for making data driven mistakes, wasting less time, etc. It is vital for the companies to support the structure of quality in their employee's performance, for this they must motivate, teach and instruct them to deliver the preferred form of routine service. Whereas, the IT practices can assist the management to accommodate the time and work efficiency with use of advanced technological software. These aspects have the significance to maintain the service quality of the

firm.

### REFERENCES

- J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 12, no. 1, pp. 55–68, 2021.
- [2] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [3] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [4] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.
- [5] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.
- [6] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [7] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [8] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [9] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.
- [10] B. A. Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [11] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [12] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [13] R. Yanamandra and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag. An Int. J.*, vol. 15, no. 1, pp. 2579–9363, 2022.

- [14] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [15] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [16] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [17] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [18] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/J.USCM.2021.11.006.
- [19] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [20] B. Al Kurdi, M. Alshurideh, and T. Al afaishata, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020.
- [21] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [22] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [23] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [24] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [25] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [26] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [27] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.

- [28] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [29] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [30] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [31] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [32] M. Alshurideh, R. M. d. T. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 47, pp. 69–78, 2012.
- [33] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [34] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [35] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [36] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429–438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [37] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [38] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. Alhamad, and H. M. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022, doi: 10.5267/j.ijdns.2022.7.006.
- [39] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [40] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [41] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.

- [42] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [43] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [44] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [45] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [46] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 1–17, 2022.
- [47] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [48] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- [49] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [50] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [51] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.
- [52] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [53] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [54] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [55] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [56] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.

- [57] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [58] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020, Accessed: Sep. 15, 2022. [Online]. Available: www.ijstr.org.
- [59] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [60] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [61] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.
- [62] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [63] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [64] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [65] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [66] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [67] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [68] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [69] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [70] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [71] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [72] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.

- [73] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.
- [74] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [75] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [76] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V211.75.
- [77] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [78] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [79] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [80] H. Alzoubi, M. Alshurideh, B. Al Kurdi, and M. Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 579– 588, 2020, doi: 10.5267/j.uscm.2020.2.005.
- [81] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [82] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [83] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [84] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [85] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [86] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," in *Its Reflection on the Citizens Standard of Living*, 2021, pp. 235–247, doi: 10.1007/978-3-030-76346-6\_22.

- [87] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [88] T. M. Ghazal et al., "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [89] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [90] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [91] H. M. Alzoubi *et al.*, "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [92] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [93] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [94] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [95] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [96] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [97] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [98] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [99] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [100] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [101] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.

- [102] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [103] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [104] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [105] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [106] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [107] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [108] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redibw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN %3D151548527%26site%3Dehost-live.
- [109] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [110] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [111] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [112] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [113] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [114] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [115] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.
- [116] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.

- [117] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [118] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 42–63, 2021.
- [119] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [120] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [121] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [122] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [123] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.
- [124] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [125] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [126] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [127] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [128] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [129] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [130] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, 2021, doi: 10.1155/2021/6262194.
- [131] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [132] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," Int. J. Technol. Innov. Manag., vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.

- [133] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [134] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [135] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.
- [136] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [137] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [138] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [139] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.

# THE IMPACT OF SERVICE QUALITY AND SERVICE TRANSPARENCY ON CUSTOMER SATISFACTION

Muhammad Turki Alshurideh<sup>1</sup>, Wasfi, A. Alrawabdeh<sup>2</sup>, Barween Al Kurdi<sup>3</sup>, Ali A. Alzoubi<sup>4</sup>

<sup>1</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>2</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-1172-7622-4617], rawabdeh@hu.edu.jo

<sup>3</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>4</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

# ABSTRACT

High-quality services that satisfy customers improve a company's capacity to compete in the market. It is crucial for the business professionals to encourage the practices that can enhance service quality and service transparency. High service quality and transparency can be attained by identifying service concerns and developing strategies for service performances, and customer satisfaction. To create and investigate a conceptual model and to study the factors with a systematic review, this research area is being provided.

Keywords: Service Quality, Service Transparency, Customer Satisfaction.

138

# 1. INTRODUCTION

A corporation will be seen highly and with greater respect in the market if it is honest and open with its customers. Organizations build brand loyalty by fortifying the relationship of trust between themselves and their customers [1], [2]. Business researchers have been debating the topic of business transparency, and they are encouraging businesses to be more open with their clients, particularly when they are producing goods that are used to benefit human health and setting fair prices that actually increase customer satisfaction. However, most businesses reverse course from the statement when it comes to implementation [3]–[5]. The reason is that implementing transparency in product aims is challenging because being transparent and its practices come with a number of liabilities for business management to maintain finances, market reputation, quality, raw materials, and many other related aspects [6], [7]. In order or investigate these factors this research is focuses on getting the systematic review from prior literature to assess the relationship and impact of service quality and service transparency on customer satisfaction.

### 2. THEORETICAL FRAMEWORK

### 2.1. Service Quality and Service Transparency

[8] evaluated that service quality has impact on service transparency. The level of transparency explains how quality service is made available for the customers [9]. Every business industry aiming to achieve success would always have one goal that is quality to retain customers [10], [11]. For this reason the companies has specific goals to get high revenues through customer satisfaction [12], [13]. The customer satisfaction is one of the tool increments of the business that remains the business position in market for a long period of time [14], [15]. The service quality is the major component of the business product that company provides to its customers and gain their loyalty towards the brand and its quality products and services [16]–[18]. The company is one of the talent management seeking organization that is helping to people to secure their career within their field of management and providing best quality services with customer satisfaction [19]–[22]. The service quality of any company increases the efficiency of the career -oriented people with business planning, management, designing, product manufacturing from raw material to its desired state for the customers in market [23]–[25]. The customer satisfaction always relates to the service expectations in which company get its high- income incentives through huge number of customers

retention and it is possible when business organizations only focus on the quality of the services that they are providing to their real customers [26]–[28]. The customer satisfaction always can get with the help of the reliability [29]. The reliability is the core mission of the company goals in which companies define their vision and mission through their service quality and gain huge benefits [30], [31]. The service quality in company business is one of the strategies in which business management and planning areas seeking the large number of customers retention through their satisfaction with the consultancy services that they are offering to customers [32]–[34]. The reliability helping to get business owners to provide real quality of the product and services that become the need of the customers in market and customers relay on the specific brand for long period of time [35], [36]. The reputation in business is the key part of the success of the business in which companies gain their corporate reputation in business market and they are static to provide the good quality services to the customers in market and sustain their position in front of the competitors [37], [38]. The reputation of the organization will be reliable among the customers and this is possible when business organizations gain customer sincerity and loyalty through providing the best quality services. The transparency in business is another part of the business management corporation [39], [40]. The business fair trade policies not only create the highincome revenues for business outcomes [41], it is also helping to manage the corporate reputation of the business among the customers and the market where high competition is existing [42]–[44]. The customer satisfaction always associated with the high business strategic profile in which they are providing best product quality, effectiveness [45], [46], efficient need of the consumers with great impact of service quality that become the basic need of their customers in market and sustain their position for competitive advantages [47].

### 2.2. Service Quality and Customer Satisfaction

[48], [49] explained the relationship where service quality has direct impact on the level of customer satisfaction. The service quality has its important role to create efficient business policies of the organizations in which strategic management department evaluate the high needs and demands of the clients of their opportunities and how they can manage the customer satisfaction for long term goals [50], [51]. The services quality always seeking customer's needs and demands [52], [53]. The customer satisfaction can get only through the high -quality product services that are offering the company groups through their quality brand product [54], [55]. The quality of the product or service hold the consumers for the product in market rather consumers switch to the

other firms for same needs. Every business has different quality and natures according to their offers that they are giving in market [17], [56]. There are number of business sectors that has different sources and strategic actions for their business sustainability in market [57]. The nature of the business also depending on their product and services that they are providing to the customers with efficient services [58]. Service quality is the tool to manage the company business reputation in market and customers associated their needs and demands for the services that has big margin for good quality and product services [59], [60]. The customers only expecting the good quality service of the company because they are ready to spend the money for the need and demand and at this time, they only chose the product that relate to the services where they find best quality with cost effective prices [61]-[64]. The quality service and ensure the business success and reputation in market. The quality services always hold the customers retention for a long period of time where business greatly doing effort to increase their customer volume and it is possible when good quality of services is mention in business vision and mission [65], [66]. Company customer volume increase is possible when business management understand the basic necessities of the product and customers' expectations towards the products. Company product reliability is possible when company understand the basic need of the service design, effectiveness, efficiency, quality and its demand in market [67], [68]. Only solutions of the services is not only focus of the business, the company business need to grow their potential through specific quality of the product and it should be sustained on same measures that was initially offered by the companies [69], [70]. The service quality and its management are a high edge competition between the business organizations in market [71]. The competitors of the same brand and product always seeking opportunities to grow their customer volume through low prices and good quality services [72]–[74]. The aim of the business corporation to manage the business efficiency through product quality in which they offer good quality of the product and services that is in need of the consumers and focusing on other measures that are also offering by their competitors for the same item [75], [76]. The competitor's activity also depending on the business market trends that continues in variance and company also doing efforts to sustain their reputation in big competitor industry [77].

### 2.3. Service Transparency and Customer Satisfaction

[78] stated the service transparency has impact on customer satisfaction. The service transparency is one of the keys of the businesses in which it remains their trustable relationship with customers and stakeholders and eliminate any suspicious act that is related to the product that they are offering
[79]–[81]. The transparency in company business not only necessary to gain customer satisfaction, it is also helping to manage business position, reputation, brand identity, the product quality and design and services that become the basic need and demand of the consumers [82], [83]. The transparency in company create the effective business introduction in which it is clearly define the business intentions, its need in customer's life, effects on customer's pocket and how the customers gain more benefits from the product as compare to other brands [84]–[86]. There are number of product brands are manipulating in global business industry where they are offering number of good quality services to the customers and create the trust among its customers and customers retention would be possible due to their satisfaction [87]–[89]. The reliability only gains when company organization focusing on the goods quality of the product and services to their customers and gain huge profit against the product sales in market [90]. The good and transparent business expectations meet the loyalty and satisfaction of the customers and this possible only when business management do not hide any flaws of the product from their customers [91]-[94]. The business organizations have several strategic policies in which they are clearly defined the harmful impacts of the product on certain limitations where it is not suitable for human needs [95], [96]. The service companies relay on their services especially for consultancy services in which they are only focusing on transparent vision of the customers and there are no extra expectations they are associating with their clients [97], [98]. The company helping to promote the client confidence according to their best suit knowledge and careers that is helloing to gain their reliable interests [99]–[101]. The transparency in business is quite in discussion of the business researchers and they are promoting the organizations to become more transparent with their customers especially when they are manufacturing the product and its usage for human health and set the good price of the product that gain customer satisfaction in real meanings [102]–[104]. But when it comes for implementations, most of the companies go back from the statement. The reason is that to become the transparent and its practices has several liabilities for business management to sustain the finances, market reputation, quality, raw material and many other associated elements that create the difficulties to implement transparency in product objectives [105]. The good quality of the product and its services related to the customers' needs and satisfaction that is the only business goals but it has number of challenges to achieve goals [106], [107]. The given information about the services is not only necessary for customers, the customer experience also create the potential effects and impacts on services and expectations of the business [108]. The transparency in

business is required for long term business goals and it should be practicing in all business sectors of global industry.

## 3. LITERATURE REVIEW

## 3.1. The Impact of Service Quality and Service Transparency on Customer Satisfaction

Lastly through the systematic review it can be stated that service quality and service transparency have strong impact on customer satisfaction [109]–[111]. The organization always seeking opportunities for those business objectives that are helping to active their goals and it is possible when customer satisfaction is the only key part of their vision and mission of the business [112], [113]. The global business industry running its functions with the huge number of key factors that create the success of the business organizations through customer satisfaction, reliability of the product, goods quality of services [114], pricing strategy and fair and transparent policies that they are telling to their customers [115]. The customers need is one of the potential sources of the sales and income that create the customer retention towards the product if customers understand its reliability and demand in their life [116], [117]. There are number of business and industrial sectors are offering number of quality products and good services for their customers through their potential efforts that remain their image among their consumers and consumers prefer the brands of their trusts [118], [119].

The customer satisfaction in business is the basic sense of achievement of the business that is only gain by the fair -trade policies of the organization about the product what they are offering and quality services that remain the position of the product in consumers life [120]–[122]. The quality services always associated with transparent trade policies of the business organizations in which they are offering best quality items and mention the transparency of the product and its usage [123], [124]. The customer experience is the basic need of the business organization where the management analyze the quality of the product services that they are offering to customers [125]–[127]. The transparency in business is a core part of the successful business outcomes that is directly associated with the customer's interests towards the product quality and their satisfaction [128]. The fair and clear objectives of the products and their desirable need in consumer's life is the core part of the businesses [129], [130]. The customer satisfaction [131], [132]. The

service quality and transparency have great impacts on customer loyalty, reliability and satisfaction towards their products [133]. Only business success will be depending on these objectives otherwise business industries lose their potential of sales in market and also effected their reputation [134]. The organization strategic planning and development always concerning on the customer satisfaction because the customers satisfaction is associated with product sales, manufacturing and several outcomes of the business stakeholders [135]. The transparency in business polices rather it is related to quality, service offers, price and sales, the all objectives are linked with the transparent and clear business objectives [136], [137]. The industries of global business hub mainly focusing and targeting the customers and business companies gaining huge revenues and benefits in market through their business goals in which they are insisting on good quality services and transparent business intentions to gain customer satisfaction [138], [139].

#### 3.2. General research Model



Figure 1: Conceptual Research Model

## 4. **DISCUSSION**

With the above arguments presented in literature and assessing the proposed research model, there are various factors that be employed to enhance service quality and transparency to improve customer satisfaction. Reliability is usually a good method to increase customer satisfaction. Reliability is the central goal of any business since it allows organizations to define their vision and mission and reap enormous rewards. One tactic used by corporate management and planning departments to retain a sizable customer base is to ensure that consumers are satisfied with the consulting services they are receiving from the organisation encourages the service transparency. It also encourages business owners to offer genuine goods and services that satisfy market need and keep clients loyal to a particular brand for an extended period of time.

## 5. CONCLUSION

When examining how service quality affects customer satisfaction, it is suggested that four characteristics of service quality, reliability, responsiveness, declaration, and empathy be improved in order to increase customer satisfaction. Additionally, customers assert that noticeable parts of service quality meet their needs and must be preserved as a result. Moreover, this research reveals that certainty, empathy, responsiveness, and reliability rank from most important to least important for improving services for each dimension.

#### REFERENCES

- T. M. Ghazal *et al.*, "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [2] B. A. Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [3] H. M. Alzoubi *et al.*, "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [4] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [5] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.

- [6] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [7] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.
- [8] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [9] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [10] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [11] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [12] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [13] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [14] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [15] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [16] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.
- [17] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 1–17, 2022.
- [18] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [19] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.

- [20] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [21] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [22] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [23] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [24] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [25] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [26] M. Alzoubi, H., Alshurideh, M., Alkurdi, B. and Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 439– 632, 2020.
- [27] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [28] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redibw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN %3D151548527%26site%3Dehost-live.
- [29] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [30] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [31] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [32] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.

- [33] B. Al Kurdi, M. Alshurideh, and T. Al afaishata, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020.
- [34] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [35] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [36] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [37] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.
- [38] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.
- [39] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [40] M. Alshurideh, R. M. d. T. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 47, pp. 69–78, 2012.
- [41] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [42] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [43] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [44] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [45] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.
- [46] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [47] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*,

- [48] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [49] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [50] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [51] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [52] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [53] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- [54] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 65–79, 2022.
- [55] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [56] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [57] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [58] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [59] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [60] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [61] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [62] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol.*

Innov. Manag., vol. 2, no. 2, pp. 52-64, 2022.

- [63] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.
- [64] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [65] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [66] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [67] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [68] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.
- [69] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [70] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, 2021, doi: 10.1155/2021/6262194.
- [71] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [72] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/J.USCM.2021.11.006.
- [73] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [74] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [75] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [76] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [77] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.

- [78] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [79] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [80] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [81] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [82] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [83] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [84] R. Yanamandra and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag. An Int. J.*, vol. 15, no. 1, pp. 2579–9363, 2022.
- [85] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [86] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [87] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [88] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [89] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V2I1.75.
- [90] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [91] J. Tellez et al., "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM

and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.

- [92] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [93] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [94] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [95] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [96] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [97] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [98] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [99] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [100] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [101] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [102] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 11, no. 1, pp. 67–78, 2022, doi: 10.1177/23197145211042232.
- [103] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," Int. J. Comput. Inf. Manuf., vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [104] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [105] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [106] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [107] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [108] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.

- [109] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 42–63, 2021.
- [110] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [111] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [112] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [113] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.
- [114] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [115] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.
- [116] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. Alhamad, and H. M. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022, doi: 10.5267/j.ijdns.2022.7.006.
- [117] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [118] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [119] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [120] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [121] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [122] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [123] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in

Determining Consumer Purchase Decision in the Retail Market," Int. J. Serv. Sci. Manag. Eng. Technol., vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.

- [124] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [125] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [126] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [127] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [128] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," in *Its Reflection on the Citizens Standard of Living*, 2021, pp. 235–247, doi: 10.1007/978-3-030-76346-6\_22.
- [129] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [130] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [131] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429– 438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [132] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [133] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [134] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [135] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [136] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [137] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol.*

Innov. Manag., vol. 1, no. 2, pp. 79-89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.

- [138] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [139] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.

# IMPACT OF SERVICE STRATEGY AND SERVICE QUALITY ON OPERATIONS EFFICIENCY

Muhammad Turki Alshurideh<sup>1</sup>, Barween Al Kurdi<sup>2</sup>, Ali A. Alzoubi<sup>3</sup>, Hevron Alshurideh<sup>4</sup>

<sup>1</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>2</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>3</sup> Public Security Directorate, Jordan, alialzuobi@yahoo.com

<sup>4</sup> Department of Foreign Languages, Faculty of English Language and Literature, The University of Jordan, Amman 11942, Jordan, Hevronalshurideh@gmail.com

## ABSTRACT

The relevance of conducting research in this field is obvious, and there is considerable opportunity for adapting service strategy and service quality concepts to the operational performance. This significance is attributed to recent developments in the organizations, such as the introduction of new types of services, the fierce multidimensional rivalry in price, speed, quality, delivery, flexibility, creative methods for managing human resources, and new technologies that enables operations efficiency. This research contributes to exploring the impact of service strategy and service quality on operations efficiency.

Keywords: Service Strategy, Service Quality, Operations Efficiency.

# 1. INTRODUCTION

Service quality and organizational performance have long been linked in the majority of service sector, including tourism, hospitality, healthcare, banking, education, insurance, etc. Although the development of customer satisfaction depends on service quality, several experts have questioned whether it actually has a direct impact on business profitability [1], [2]. Similarly, the operations efficiency used to evaluate how well inputs are converted into outputs [3], [4]. As a result, the service and manufacturing industries increasing plant operating efficiency through planning,

scheduling, and control has long been a goal [5]–[7]. Additionally, an organizational objective is to achieve competitive edge that can possible with, managerial and operational work efficiency. By providing high service in order to train the employees, offering incentives to perform better can enhance the service quality that leads a business toward successive environment [8]–[10]. For the purpose to know business operational efficiency what are the impacts of service strategy and quality on it. A theoretical review can assist regarding figuring out the relationships and impact.

#### 2. LITERATURE REVIEW

## 2.1. Impact of service strategy on service quality

[11] stated that service strategy plays a vital role in any company's operations to give them the best quality services. It also seems that companies can never say that they are useful in quality services because customers' expectations are getting change day by day [12]–[14]. Most businesses are getting a failure to think that they are giving the best services to their customers, but other companies are getting out of them from the market [15]–[17]. Therefore, it is imperative that companies be active to perform a little higher if companies are getting some level. Here we have some strategies that are helping to improve the service quality.

#### 2.1.1. Open up more channels for customer feedback

The first point of success in the service quality to give them many ways to communicate [18]– [20]. With their customer because all the time, they are looking to get in touch with business. It is necessary to know what your customer wants from you and how they respond to them [21]. There are different ways: survey solutions, mailed cards with physical products, different social media platforms (Facebook, Twitter, Instagram), and a feedback box on the business counter. So, to get better interaction with the customer, it is better to select a perfect option [22], [23].

#### 2.1.2. Embrace the path of the snail

The second way of success in their customers' quality services is to embrace the snail's path [24], [25]. It is better to ask a company that they never appreciate employees for their quality work, suppliers to get the best services from them, or a customer to get a profitable business from them? If it does not happen in the past, then an appreciation should be given to them and enhance

business performance with quality services [26]–[28]. They can give appreciation by merely sending them a handwritten note to say thanks or making a handmade appreciation card.

## 2.1.3. Hire for customer service greatness

Many people will suggest that hiring a new employee with the best team gives customer service greatness [29]–[31]. The company can only succeed in the business to give quality customer quality services with the right team, but it is not compulsory. The organization can retrain the existing employees and motivate and inspire them to give better customer representative services [32]. However, in the end, it is the truth that there should be the right individual for the right job at the right time [33], [34]. It is not necessary to go with this option. Managers can think about how to improve customer service culture and can manage changes accordingly [35], [36].

## 2.1.4. Empower employees to resolve issues

In this part, the most effective way to encourage existing employees to perform well and give their best services to customers [37]–[39]. In the current organizational environment, we see the micro-manager because everyone pulling other legs. Therefore, they need to empower existing employees to resolve the issues and increase customer expectations [40].

#### 2.1.5. Provide a learning environment

To improve client satisfaction is to give a learning environment to their employees. It is for the customer service team and for training all employees working in an organization [41], [42]. They should learn and develop their skills like content, relationship, technical, and management skills [43], [44]. In the end, it will help to improve the customer service field.

#### 2.1.6. Practice active listening with customers

Another way to succeed in the customers' quality service is to give them an active listening practice to their customers [45]. The company needs to train its staff to build good listening skills to better service and increase customer service quality [46], [47].

In the end, most businesses are getting a failure to think that they are giving the best services to their customers, but other companies are getting out of them from the market [48], [49]. Therefore, it is imperative that companies be active to perform a little higher if companies are getting some level. It is the truth that there should be the right individual for the right job at the right time [37],

[50], [51]. Managers can think about how to improve customer service culture and can manage changes accordingly.

## 2.2.Impact of service strategy on operations efficiency

[52] stated the impact of service strategy on operations efficiency. Service strategy plays a vital role in any company's operations to improve its operational activates [53]–[55]. It also seems that companies can never say that they are operating effectively and meet the customers' expectations, which are changing daily [56]. Most businesses are getting a failure to think that they are running the best operational activities, but other companies improve them daily [57]. Therefore, it is imperative that companies be active to perform a little higher if companies are getting some level. Here we have some strategies that are helping to improve the operational activities [58]–[60].

## 2.2.1. Know operation

The best way to improve the operational activities, the supervisors and manager, is going through the operational areas to know whether it is going well or not? It is a ubiquitous method and way of judging the company's operations [61]. However, if we go for more formal ways, the company will use different audit reports, analysis tools, and business intelligence tactics to make operations more effective and efficient [62], [63].

## 2.2.2. Train the employee again & again

stated the other way of improvising the operational activities is to enhance the employee's skills to learn more about the system and make more efficient operations [64]. They need to build more standards like SOPs documentation, building training courses, and methodologies. In the end, the management must train the employees again and again unless they will fully skilled.

## 2.2.3. Put employee first

stated that to improve business growth and operational performance, it is crucial to keep in mind that people are the critical elements for business success [65]. Their relationship with each other is essential. It is better to focus on labor productivity by encouraging, motivating, and rewarding the company's top performers. They should also discourage unproductive activity on the premises of an organization [66], [67].

## 2.2.4. Focus on fulfilling the order

Due to the increase in the operation activities, there are so many challenges an organization may face due to high numbers of orders, product categories, regular maintenance, and usage of proper tools to meet these challenges [68]–[70]. There are different ways to improve the system design by evaluating and operations of the mobile devices zonal areas to set a goal for the operational team and meet the requirements.

## 2.2.5. Customer service improvement

[71] stated the best way to improve operational efficiency with the help of the best service strategy. One of them is an improvement in customer services. If the customers are satisfied with the company's products and services, then a successful will be next door, but if they are not giving good customer services, then the situation will be the opposite [72]–[74].

## 2.2.6. Remove hurdles to success

The best way to improve the operations is to remove the hurdles from the success and allow the employees to show their improvement, ultimately affecting the operations' efficiency due to quality services [75], [76].

## 2.2.7. Raise the Talent

After the success in the operational activities, it is time to raise the talent and increase their improvement, positively impacting the results and increasing its productivity and low performer's employees [77].

## 2.2.8. Evaluation of the processes

The proper evaluation in the operational department process is possible if we have proper documentation to follow the process [78], [79]. There should be proper continual process improvement, which would help properly incorporate the proper workflow and automation.

#### 2.2.9. Standard against your colleagues

According to the standard that should set to meet the requirements and learn more about the strategies that are useful for a business's success. To make a more successful operation, the engagement with the suppliers and vendors allows adding more values [80]–[82].

#### 2.2.10. Evaluate the strength of your system

It also seems that companies can never say that they are operating effectively and meet the customers' expectations, which are changing daily [83]. Most businesses are getting a failure to

think that they are running the best operational activities, but other companies improve them daily. Therefore, it is imperative that companies be active to perform a little higher if companies are getting some level [84].

## 2.3.Impact of service quality on operations efficiency

Service quality is a crucial factor and is mostly used to compare the customer's expectations and relationships with its performance [85]. If the business has a high level of quality services, it can meet the customers' needs and have a competitive advantage in a particular industry. To understand more about the service quality, we have found an equation which is:

## 2.3.1. Service Quality (SQ) = Performance (P) - Expectations (E)

The first point of success in the service quality to give them many ways to communicate. With their customer because all the time, they are looking to get in touch with your business [86], [87]. It is necessary to know what your customer wants from you and how they respond to them [88]. There are different ways: survey solutions, mailed cards with physical products, different social media platforms (Facebook, Twitter, Instagram), and a feedback box on the business counter. So, to get better interaction with the customer, it is better to select a perfect option [89]–[91]. The second way of success in their customers' quality services is to embrace the snail's path [92]–[94]. It is better to ask a company that they never appreciate employees for their quality work, suppliers to get the best services from them, or a customer to get a profitable business from them?

If it does not happen in the past, then an appreciation should be given to them and enhance business performance with quality services [95]. They can give appreciation by merely sending them a handwritten note to say thanks or making a handmade appreciation card [96]. Many people will suggest that hiring a new employee with the best team gives customer service greatness [97]. The company can only succeed in the business to give quality customer quality services with the right team, but it is not compulsory [98][99]. The organization can retrain the existing employees and motivate and inspire them to give better customer representative services [100]. However, in the end, it is the truth that there should be the right individual for the right job at the right time [101]. It is not necessary to go with this option. Managers can think about improving customer service culture. According to the standard set, they can manage changes accordingly to meet the

requirements and learn more about the strategies useful for a business's success [102]–[105]. To make a more successful operation, the engagement with the suppliers and vendors allows adding more values. It also seems that companies can never say that they are operating effectively and meet the customers' expectations, which are changing daily [106], [107]. Most businesses are getting a failure to think that they are running the best operational activities, but other companies improve them daily [108], [109]. Therefore, it is imperative that companies be active to perform a little higher if companies are getting some level. There should be proper continual process improvement, which would help properly incorporate the proper workflow and automation [110].

#### 2.4.Impact of Service Strategy and Service Quality on Operations Efficiency

[87], [111], [112] stated the relationship between the impact of service strategy and service quality on operations efficiency. Both factors play a pivotal role in the operation's efficiency: service strategy and service quality. There are many factors which are helping to make a healthy and prosperous operational activity [113], [114].

The first point of success in the service quality to give them many ways to communicate. With their customer because all the time, they are looking to get in touch with your business [115]–[117]. It is necessary to know what your customer wants from you and how they respond to them. There are different ways: survey solutions, mailed cards with physical products, different social media platforms (Facebook, Twitter, Instagram), and a feedback box on the business counter. So, to get better interaction with the customer, it is better to select a perfect option [118]–[121].

The second way of success in their customers' quality services is to embrace the snail's path. It is better to ask a company that they never appreciate employees for their quality work, suppliers to get the best services from them, or a customer to get a profitable business from them? If it does not happen in the past, then an appreciation should be given to them and enhance business performance with quality services [122]–[124]. They can give appreciation by merely sending them a handwritten note to say thanks or making a handmade appreciation card [125], [126].

In this part, the most effective way to encourage existing employees to perform well and give their best services to customers [127]. In the current organizational environment, we see the micromanager because everyone pulling other legs [128]. Therefore, they need to empower existing employees to resolve the issues and increase customer expectations [129], [130]. The best way to improve the operational activities, the supervisors and manager, is going through the operational areas to know whether it is going well or not? It is a ubiquitous method and way of judging the company's operations. However, if we go for more formal ways, the company will use different audit reports, analysis tools, and business intelligence tactics to make operations more effective and efficient[131]–[133].

Another way of improvising the operational activities is to enhance the employee's skills to learn more about the system and make more efficient operations [134]. They need to build more standards like SOPs documentation, building training courses, and methodologies. In the end, the management must train the employees again and again unless they will fully skilled [135], [136].

To improve business growth and operational performance, it is crucial to keep in mind that people are the critical elements for business success [137]. Their relationship with each other is essential. It is better to focus on labor productivity by encouraging, motivating, and rewarding the company's top performers [138]. They should also discourage unproductive activity on the premises of an organization.

Due to the increase in the operation activities, there are so many challenges an organization may face due to high numbers of orders, product categories, regular maintenance, and usage of proper tools to meet these challenges [139]. There are different ways to improve the system design by evaluating and operations of the mobile devices zonal areas to set a goal for the operational team and meet the requirements.

## 2.5. General Research Model



Figure 1: Conceptual Research Model

## 3. DISCUSSION

It is imperative to remember that people are the key components for business success if you want to increase corporate growth and operational performance. Their interdependence on one another is crucial. It is preferable to concentrate on increasing labor productivity by praising, inspiring, and recognizing the best employees. They should also forbid useless activity on an organization's grounds. An organisation may confront a great deal of obstacles as a result of increased operational operations, including large quantities of orders, a wide range of product categories, regular maintenance, and the need to use the right tools to address these challenges. In order to create a target for the operational team and achieve the requirements, the organizational management may require to adopt the strategies to enhance service quality by utilizing the human capital in the organization.

#### 4. CONCLUSION

The above research can be summarized with strategical implications that can enhance the business performance by improving operations efficiency. There are various strategies can be implemented to enhance the business operations efficiency and service quality in order to keep the effective strategical performance. It's crucial to manage product and service quality to make sure that a company excels at satisfying customer needs and achieving organizational objectives.

## REFERENCES

- [1] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.
- [2] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [3] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [4] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [5] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [6] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.
- [7] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.
- [8] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [9] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [10] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [11] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. Alhamad, and H. M. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022, doi: 10.5267/j.ijdns.2022.7.006.
- [12] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.

- [13] B. A. Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [14] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [15] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429– 438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [16] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [17] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [18] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [19] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [20] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [21] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [22] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [23] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," in *Its Reflection on the Citizens Standard of Living*, 2021, pp. 235–247, doi: 10.1007/978-3-030-76346-6\_22.
- [24] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 12, no. 1, pp. 55–68, 2021.
- [25] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [26] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [27] J. Tellez *et al.*, "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," *Comput. Intell. Neurosci.*, vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.

- [28] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [29] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [30] B. Al Kurdi, M. Alshurideh, and T. Al afaishata, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020.
- [31] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [32] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [33] R. Yanamandra and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag. An Int. J.*, vol. 15, no. 1, pp. 2579–9363, 2022.
- [34] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [35] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [36] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [37] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [38] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [39] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [40] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [41] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [42] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," Am. J. Ind. Bus. Manag., vol. 12, no. 05, pp. 1067–1078, 2022, doi:

10.4236/ajibm.2022.125056.

- [43] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [44] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [45] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [46] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [47] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [48] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [49] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [50] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [51] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V2I1.75.
- [52] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [53] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020, Accessed: Sep. 15, 2022. [Online]. Available: www.ijstr.org.
- [54] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.
- [55] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [56] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [57] M. Alshurideh, R. M. d. T. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 47, pp. 69–78, 2012.

- [58] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [59] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [60] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [61] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/J.USCM.2021.11.006.
- [62] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [63] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- [64] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [65] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [66] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [67] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [68] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [69] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [70] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [71] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020.
- [72] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.

- [73] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [74] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [75] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.
- [76] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [77] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [78] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [79] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [80] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 599–612, 2020, doi: 10.5267/j.uscm.2020.2.003.
- [81] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [82] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [83] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [84] M. Alzoubi, H., Alshurideh, M., Alkurdi, B. and Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 439– 632, 2020.
- [85] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [86] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.

- [87] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 65–79, 2022.
- [88] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [89] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [90] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [91] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [92] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [93] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [94] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [95] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [96] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.
- [97] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [98] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [99] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 80–96, 2022.
- [100] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy – An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [101] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing

Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.

- [102] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [103] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [104] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [105] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [106] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [107] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [108] T. M. Ghazal et al., "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [109] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [110] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [111] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [112] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [113] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 39–55, 2021, doi: 10.54489/ijcim.v1i1.32.
- [114] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.
- [115] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [116] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," Int. J. Technol. Innov. Manag., vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.

- [117] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 42–63, 2021.
- [118] H. M. Alzoubi et al., "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [119] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 1–17, 2022.
- [120] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [121] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [122] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [123] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.
- [124] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.
- [125] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [126] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [127] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [128] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [129] M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Dehost-live.
- [130] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.
- [131] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.

- [132] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, 2021, doi: 10.1155/2021/6262194.
- [133] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [134] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [135] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [136] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [137] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [138] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [139] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.

# IMPACT OF SERVICE TRANSPARENCY AND SERVICE CONTROL ON COMPETITIVENESS

Barween Al Kurdi<sup>1</sup>, Muhammad Turki Alshurideh<sup>2</sup>, Hevron Alshurideh<sup>3</sup>

<sup>1</sup> Department of Marketing, Faculty of Economics and Administrative Sciences, The Hashemite University, P.O. Box 330127, Zarqa 13133, Jordan. Orcid [0000-0002-0825-4617], barween@hu.edu.jo

<sup>2</sup> Department of Marketing, School of Business, The University of Jordan, Amman 11942, Jordan, Orcid [0000-0002-7336-381X], m.alshurideh@ju.edu.jo

<sup>3</sup> Department of Foreign Languages, Faculty of English Language and Literature, The University of Jordan, Amman 11942, Jordan, Hevronalshurideh@gmail.com

# ABSTRACT

The successful business organizations simply concentrated on their purpose, mission, vision, and goals, and they established open business practices to quench their clients and get the best opportunities to compete with their competitors by offering superior customer service and future orientations. The foundational component of businesses is transparency at all levels, which helps the company gain a significant amount of consumer confidence for both its commercial and residential solutions. These businesses continually assess their rivals' innovative business strategies and client success rates. A systematic review is embracing the research to improve understanding of the impact of service transparency and service control on competitiveness in order to present the literature-based evidence.

Keywords: Service Transparency, Service Control, Competitiveness.

# 1. INTRODUCTION

One of the main goals of corporations is to be competitive, and they strive to do this by advocating any and all means possible to outdo their rivals who have already established themselves as market leaders [1]. The ability to compete is a benefit for business organizations because it motivates them to improve their effectiveness, fair trading tactics, and on-time project delivery to clients, which is the essence of true company management [2]–[4]. The expectations of their customers are closely

related to their operations, and business organizations, particularly in contracting and trading agencies, are heavily involved with risk factors [5]–[7]. At this time, only fair, transparent project strategies and high-quality services are able to support the company's long-term goals [8], [9]. In order to assess the suitable strategies and their impact on organizational competitiveness, this research is formed to conclude the facts with the help of reviewing of prior studies, research, journals and books.

#### 2. LITERATURE REVIEW

#### 2.1. Service Transparency and Service Control

[10], [11] explained that service transparency is possible only when there is system of service control. The free Trading and Contracting company are highly profitable business in Middle east [12]–[14]. These companies are the leading construction group of companies that are currently managing all kind of commercial and private buildings, villas, residencies, government tenders and many other projects [15], [16]. The companies are known for its high -quality professional services in construction sector where they are plan, design and execute dream projects with cost effective budgets [17], [18]. The contracting companies mainly focusing on all tenure that they committed and deliver on time [19]–[21]. These companies started their journey with staff members in which skilled, semi- skilled and non -skilled employees as a civil maintenance professional and later the company become the known successful building construction business that is providing high quality building solutions for its customers [22]–[25]. Since past decades, there are number of known international brands of contracting trading agencies are coming in middle-east [26], [27].

Service transparency is one of the major goals of the business organizations that they commit with their customers in market and gain huge trust of its customers [28]–[30]. The companies create its market position through its transparent and professional working services that they commit at the time of project development and focusing on all measures that is required to deliver the expected outcomes [31]–[34]. The commercial building and huge mega infrastructure of the Gulf countries mostly designed and construct by the world -famous construction companies [35]–[38]. The reason is that these companies create its trustworthy position and need in the state and become the first choice of the stakeholders and clients [39]. The service transparency is the goal of the business

organization in which they are highly keen to promote all transparent and clear service features for its customers and providing all visible and hidden facts of the projects [8], [40], [41]. The aim of providing huge knowledge and its impacts along with effects and its future development outcomes is a goal of construction companies [42], [43]. The services quality is highly managed by the company through controlling the objects that are essential to clear the project clients to meet their expectations [44], [45]. The construction and contracting trade are one of the core responsibilities on organization in which various risk factors are involved with its continuing progressive outcomes [46]–[48]. The business organizations that are associated with contracting sectors mainly design the huge commercial and business units along with villas and residential projects from small housing schemes to huge private houses and all projects highly focused for transparent business polices and service quality management through controlling the measures of governmental, environmental and social justice [49]–[51]. The companies providing best quality services in all project management and completion through transparent and clear strategic policies that clear the vision of the customers before taking any decision and gain the trust of the several business organizations in same sector [52]–[54]. The services with fair information and controlling on all kind of matters that comes in project is highly observable for the company in order to meet the desire expectations of the clients and become the first choice in construction sector [55]–[57].

#### 2.2. Service Transparency and Competitiveness

[58], [59] explained service transparency and competitiveness has strong relationship. The organizations which are highly keen to promote best quality product services for its customers with competitive advantages and it is only possible when clear information and expectations are understandable for its clients who are expecting the project from the concern departments [48], [60]. The Trading and contracting companies is the leading solution provider of construction of the private and government projects in which commercial, business and private homes, building, business hubs are included [61], [62]. These organizations only focusing on all measures of the project and business that meet the vision and mission of the company that they set at the time of beginning the business plan [63]–[66]. The business organizations always gain the trust of its customers through its visible project or product that is the only sample of the business productivity [67]. There are number of projects are completed in the Gulf countries that is designed and developed by the local and international business companies [68], [69]. These companies only
focusing on services quality management through its clear and fair policies that are easily gain the customer vision [70], [71]. The transparent features of business policies are helping to companies and organizations to build their strong relationships with customers who are the asset of the businesses [72], [73]. The transparent business product features are creating the best and desired outcomes for the clients of the business and they trusted on business organizations for their next projects [74]–[76]. The successful business organizations gain huge customer retention because they are providing detail knowledge and information of the project that is expected by the customers and clear their vision for future outcomes [77], [78]. The companies highly keen to create the customers knowledge -based department where number of professional consultancies are helping to clients to get detail information through clear visible objectives of the project [79], [80]. The companies create its strong position in the gulf region through its clear progressive strategies that is helping to achieve best competitive advantages among its competitors [81]–[83]. There are number of companies are penetrating in market of Middle East especially in trading and contracting industry because the current competition of the region in Arabic countries highly focused for huge mega infrastructures [84] and business commercial hubs in which residential projects and shopping malls are on the top of the list [85]–[87]. The competition in market giving the hard time to the contracting companies and in this respect, the companies are making several polices to attract the customers and hide detail facts of the projects that can be worse for future outcomes [88].

### 2.3. Service Control and Competitiveness

[89], [90] explained the relationship between service control and competitiveness. Service control has impact on competitiveness. This is the most challenging situation for any kind of business organizations to remain its position in market especially among its customers who came again and again for their need towards the companies [91]–[93]. The competitiveness always gains through the customer retention and it is possible when quality services are providing to the customers along with transparent features of the product, its hidden facts, future outcomes and profit that is related to the expectation [94], [95]. The business organizations have number of shareholders, suppliers, manufacturers and customers and balance between all stakeholders is difficult objective for business organizations [96], [97]. The services should be controlled under the desired management

of the business organization and it is only possible when organizations set the fait polices and strategies for their business that they are providing to their customers and gain their huge satisfaction for the long time run of the business in market [98]–[100]. Business organizations also managing huge business competitiveness in market where already number of contracting and trading companies are effectively managing their business polices through their efficient construction developments and also gaining the customer trust [101]. At this stage the service controlling is one of the objectives for business companies where they have to manage balance between the planning, development, design and execution [102]–[104]. The planning is one of the stages of the project where the company set the actual theme of the project development expectation and concerning with all measures that has to be face during the project [105]. The companies mainly target its customers through providing the best quality services that they are expected with clear and noticeable project information [106], [107]. The construction is one of the sensitive business sectors where huge capital is involved of the shareholders and there is no room for errors [97], [108]. It is high responsible act for contracting companies in which environmental, social, geographical and many other factors are involved [109]. The risk always indulges in the contracting projects and it is only possible when planning and strategic team focused on all measures that create any future conflict [110], [111]. The services controlling is the only solution for business companies in which they are highly promote the competitive advantages in market and gain best future outcomes [112]–[114]. The competition is highly increasing in Gulf Countries especially when all Gulf countries are in the line of to achieve their vision 2030, the construction companies are becoming more active to developed huge commercial, private and government projects that create the country's global position in market [115], [116]. From last few decades the construction projects are highly taking place in Gulf countries and the reason is that to attract the international investors and tourism around the world who have margin to promote the country's economy with high income revenues [117], [118]. Several business organizations also achieve its competitive advantages in from of its rivals through providing the best quality services and controlling objectives and gain best market competitiveness through its customers satisfaction and their retention towards the company as a first choice [119], [120].

## 2.4. The impact of Service transparency and service control on competitiveness

The impact of service transparency and service control help companies to gain competitiveness. The organizations managing transparent and clear business and trading policies with its clients and stakeholders [121], [122]. The companies gains its trust within the short period of time and the reason only focusing on its clear objectives that they are providing to their customers [123], [124]. The company managing its effective business polices through planning, development and implementations that are helping to business to hold its existing customers and gain new customer attention [115], [125]. The company getting best business revenues through clear information providing system in which there is no hidden cost and detail can be hide from the clients and shareholders who are investing their huge capitals from local and international investors [126]–[129]. The good quality services are associated with fair business strategies that is providing by the Rashid group at all levels of the development areas of the project and helping to customers to choose the company for their next projects [130].

The customer satisfaction always can be gain by the good quality of the products and services that are providing by the business organization especially at the time of contracting about the project [131]–[135]. The business organizations gain the customer trust through their fair trading polices and good services that are within the control of the project team members [136]. Because there is no space for any error and before implementations of the projects, the detail knowledge- based information is required to controlling the risk factors that are highly associated with construction sectors [137]. There are number of political, social, environmental and regional factors are involved with contracting business planning and business organizations need to hold all circumstances that are not favorable for them [138], [139]. The service controlling to design the project details and its favorable objectives that are helping to deliver the project on time to its customers.

#### General Research Model



Figure 1: Conceptual Research Model

### 3. DISCUSSION

The competitiveness is one of the core objectives of the businesses in which they are trying to promote all feasible measures to compete the competitors who are already placed their strong position in market. The competitiveness is an advantage for the business organizations that encourage them to increase their efficiency, effective business polices, fair trading strategies and on time business project delivery to customers that is the real business management. The business organizations especially in contracting and trading agencies are highly involved with risk factors and customers' expectations are highly associated with their operations. At this time, only fair transparent project strategies and services of good quality helping to sustain the business goals for a long period of time. The business organizations always meet the customer's expectations and trust through their satisfaction and their retention because they are only focusing on customer happiness and their trust towards the company. The competition in market especially in Middle East is highly increasing because the foreign investors interest also increasing in UAE and this is the reason the competition is high in the state and several companies actively increasing their expansion of the business with several business strategies and competitive advantages.

## 4. CONCLUSION

The high quality of the goods and services that a business organization offers can always increase client satisfaction, especially when a project is being contracted for. Businesses acquire the trust of their clients by upholding ethical business practices and providing excellent services to get customer retention that ultimately results in market competitiveness. To gain sustainable organizational competitiveness customer satisfaction is more reliable that can be achieved by providing service accuracy and delivering according to the requirement.

# REFERENCES

- [1] O. Gulseven and G. Ahmed, "The State of Life on Land (SDG 15) in the United Arab Emirates," *Int. J. Soc. Ecol. Sustain. Dev.*, vol. 13, no. 1, pp. 1–15, 2022, doi: 10.4018/ijsesd.306264.
- [2] A. Abudaqa, R. A. Alzahmi, H. Almujaini, and G. Ahmed, "Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE?," *Int. J. Entrep. Ventur.*, vol. 14, no. 3, pp. 330–350, 2022, doi: 10.1504/ijev.2022.124964.
- [3] Edward Probir Mondol, "the Role of Vr Games To Minimize the Obesity of Video Gamers," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.70.
- [4] S. Joghee, H. M. Alzoubi, and A. R. Dubey, "Decisions effectiveness of FDI investment biases at real estate industry: Empirical evidence from Dubai smart city projects," *Int. J. Sci. Technol. Res.*, vol. 9, no. 3, pp. 3499–3503, 2020, Accessed: Sep. 15, 2022. [Online]. Available: www.ijstr.org.
- [5] Nasim, S. F., M. R. Ali, and U. Kulsoom, "Artificial Intelligence Incidents & Ethics A Narrative Review. International Journal of Technology, Innovation and Management," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 2, pp. 52–64, 2022.
- [6] M. El Khatib, S. Hamidi, I. Al Ameeri, H. Al Zaabi, and R. Al Marqab, "Digital Disruption and Big Data in Healthcare-Opportunities and Challenges," *Clin. Outcomes Res.*, vol. 14, pp. 563–574, 2022, doi: 10.2147/CEOR.S369553.
- [7] T. M. Ghazal *et al.*, "Modeling habit patterns using conditional reflexes in agency," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 539–552, Aug. 2021, doi: 10.32604/iasc.2021.018888.
- [8] G. Ahmed and Nabeel Al Amiri, "the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.58.
- [9] M. Alnuaimi, H. M. Alzoubi, D. Ajelat, and A. A. Alzoubi, "Towards intelligent organisations: An empirical investigation of learning orientation's role in technical innovation," *Int. J. Innov. Learn.*, vol. 29, no. 2, pp. 207–221, 2021.
- [10] A. M. Sakkthivel, G. Ahmed, C. T. Amponsah, and G. N. Muuka, "The influence of price and brand on the purchasing intensions of Arab women: an empirical study," *Int. J. Bus. Innov. Res.*, vol. 28, no. 2, pp. 141–161, 2022, doi: 10.1504/IJBIR.2022.123260.

- [11] M. Alshurideh, B. Al Kurdi, S. A. Salloum, I. Arpaci, and M. Al-Emran, "Predicting the actual use of m-learning systems: a comparative approach using PLS-SEM and machine learning algorithms," *Interact. Learn. Environ.*, 2020, doi: 10.1080/10494820.2020.1826982.
- [12] M. T. Alshurideh, B. Al Kurdi, R. Masa'deh, and S. A. Salloum, "The moderation effect of gender on accepting electronic payment technology: a study on United Arab Emirates consumers," *Rev. Int. Bus. Strateg.*, vol. 31, no. 3, pp. 375–396, 2021, doi: 10.1108/RIBS-08-2020-0102.
- [13] M. El Khatib, A. Al Mulla, and W. Al Ketbi, "The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management," *Adv. Internet Things*, vol. 12, no. 03, pp. 88–109, 2022, doi: 10.4236/ait.2022.123006.
- [14] T. Ghazal, T. R. Soomro, and K. Shaalan, "Integration of Project Management Maturity (PMM) Based on Capability Maturity Model Integration (CMMI)," *Eur. J. Sci. Res.*, vol. 99, p. 418{\textendash}428, 2013.
- [15] S. Rana, S. Verma, M. M. Haque, and G. Ahmed, "Conceptualizing international positioning strategies for Indian higher education institutions," *Rev. Int. Bus. Strateg.*, vol. 32, no. 4, pp. 503– 519, 2022, doi: 10.1108/RIBS-07-2021-0105.
- [16] H. M. Alzoubi, M. Vij, A. Vij, and J. R. Hanaysha, "What Leads Guests to Satisfaction and Loyalty in UAE Five-Star Hotels? AHP Analysis to Service Quality Dimensions.," ENLIGHTENING Tour. A PATHMAKING J., vol. 11, no. 1, pp. 102–135, 2021.
- [17] B. A. Kurdi, M. Alshurideh, and S. A. Salloum, "Investigating a theoretical framework for elearning technology acceptance," *Int. J. Electr. Comput. Eng.*, vol. 10, no. 6, 2020, doi: 10.11591/IJECE.V10I6.PP6484-6496.
- [18] N. Ali *et al.*, "Modelling supply chain information collaboration empowered with machine learning technique," *Intell. Autom. Soft Comput.*, vol. 30, no. 1, pp. 243–257, 2021, doi: 10.32604/iasc.2021.018983.
- [19] A. Abudaqa, M. F. Hilmi, H. Almujaini, R. A. Alzahmi, and G. Ahmed, "Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE)," J. E-Learning Knowl. Soc., vol. 17, no. 3, pp. 110–118, 2021, doi: 10.20368/1971-8829/1135556.
- M. El Khatib, M. Hammerschmidt, and M. Al Junaibi, "Leveraging innovation input on enhancing smart service quality. Cases from Abu Dhabi Emirate," *Int. J. Manag. Cases*, vol. 23, no. 2, pp. 46–62, 2021, [Online]. Available: http://www.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Dehost-live.
- [21] M. A. M. Afifi, D. Kalra, T. M. Ghazal, and B. Mago, "Information Technology Ethics and Professional Responsibilities," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 4, pp. 11336–11343, 2020, [Online]. Available: https://www.researchgate.net/publication/352159596.
- [22] N. Al Amiri, R. E. A. Rahim, and G. Ahmed, "Leadership styles and organizational knowledge management activities: A systematic review," *Gadjah Mada Int. J. Bus.*, vol. 22, no. 3, pp. 250– 275, 2020, doi: 10.22146/gamaijb.49903.
- [23] Maged Farouk, "Studying Human Robot Interaction and Its Characteristics," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.73.
- [24] Saad Masood Butt, "Management and Treatment of Type 2 Diabetes," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.71.

- [25] T. M. Ghazal *et al.*, "Hep-pred: Hepatitis C staging prediction using fine {G}aussian SVM," *Comput. Mater. Contin.*, vol. 69, no. 1, pp. 191–203, Jun. 2021.
- [26] T. M. Ghazal *et al.*, "IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare—A Review," *Futur. Internet*, vol. 13, no. 8, p. 218, 2021, doi: 10.3390/fi13080218.
- [27] R. M. Al Batayneh, N. Taleb, R. A. Said, M. T. Alshurideh, T. M. Ghazal, and H. M. Alzoubi, "IT Governance Framework and Smart Services Integration for Future Development of Dubai Infrastructure Utilizing AI and Big Data, Its Reflection on the Citizens Standard of Living," in *Its Reflection on the Citizens Standard of Living*, 2021, pp. 235–247, doi: 10.1007/978-3-030-76346-6\_22.
- [28] Neyara Radwan, "the Internet'S Role in Undermining the Credibility of the Healthcare Industry," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.74.
- [29] Nada Ratkovic, "Improving Home Security Using Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijcim.v2i1.72.
- [30] M. M. El Khatib and G. Ahmed, "Robotic pharmacies potential and limitations of artificial intelligence: A case study," *Int. J. Bus. Innov. Res.*, vol. 23, no. 3, pp. 298–312, 2020, doi: 10.1504/IJBIR.2020.110972.
- [31] J. C. T. Gaytan, A. M. Sakthivel, S. S. Desai, and G. Ahmed, "Impact of Internal and External Promotional Variables on Consumer Buying Behavior in Emerging Economy An Empirical Study," *Skyline Bus. J.*, vol. 16, no. 1, pp. 45–54, 2020, doi: 10.37383/sbj160104.
- [32] A. Alzoubi, "MACHINE LEARNING FOR INTELLIGENT ENERGY CONSUMPTION IN SMART HOMES," Int. J. Comput. Inf. Manuf., vol. 2, no. 1, p. 2022, May 2022, doi: 10.54489/IJCIM.V211.75.
- [33] N. Alsharari, "the Implementation of Enterprise Resource Planning (Erp) in the United Arab Emirates: a Case of Musanada Corporation," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.57.
- [34] A. Q. M. Alhamad, I. Akour, M. Alshurideh, A. Q. Al-Hamad, B. Al Kurdi, and H. Alzoubi, "Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM," *Int. J. Data Netw. Sci.*, vol. 5, no. 3, pp. 311–320, 2021, doi: 10.5267/j.ijdns.2021.6.002.
- [35] F. Del and G. Solfa, "IMPACTS OF CYBER SECURITY AND SUPPLY CHAIN RISK ON DIGITAL OPERATIONS: EVIDENCE FROM THE UAE PHARMACEUTICAL INDUSTRY Federico Del Giorgio Solfa," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 18– 32, 2022.
- [36] M. Alshurideh, S. A. Salloum, B. Al Kurdi, A. A. Monem, and K. Shaalan, "Understanding the quality determinants that influence the intention to use the mobile learning platforms: A practical study," *Int. J. Interact. Mob. Technol.*, vol. 13, no. 11, pp. 157–183, 2019, doi: 10.3991/ijim.v13i11.10300.
- [37] M. Alshurideh, B. Al Kurdi, A. Abu Hussien, and H. Alshaar, "Determining the main factors affecting consumers' acceptance of ethical advertising: A review of the Jordanian market," J. Mark. Commun., vol. 23, no. 5, pp. 513–532, Mar. 2017, doi: 10.1080/13527266.2017.1322126.
- [38] M. M. El Khatib and M. J. C. Opulencia, "The Effects of Cloud Computing (IaaS) on E- Libraries in United Arab Emirates," *Procedia Econ. Financ.*, vol. 23, pp. 1354–1357, 2015, doi: 10.1016/s2212-5671(15)00521-3.

- [39] D. M. M. El Khatib, "Integrating Project Risk Management and Value Engineering in Tendering Processes," *Int. J. Eng. Res.*, vol. 4, no. 8, pp. 442–445, 2015, doi: 10.17950/ijer/v4s8/808.
- [40] M. M. El Khatib, A. Al-Nakeeb, and G. Ahmed, "Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study," *iBusiness*, vol. 11, no. 01, pp. 1– 10, 2019, doi: 10.4236/ib.2019.111001.
- [41] S. Hamadneh, O. Pedersen, M. Alshurideh, B. A. Kurdi, and H. M. Alzoubi, "An Investigation Of The Role Of Supply Chain Visibility Into The Scottish Blood Supply Chain," J. Leg. Ethical Regul. Issues, vol. 24, no. 1, pp. 1–12, 2021.
- [42] B. A. Kurdi, M. Alshurideh, S. A. Salloum, Z. M. Obeidat, and R. M. Al-dweeri, "An empirical investigation into examination of factors influencing university students' behavior towards elearning acceptance using SEM approach," *Int. J. Interact. Mob. Technol.*, vol. 14, no. 2, pp. 19– 41, 2020, doi: 10.3991/ijim.v14i02.11115.
- [43] J. Hanaysha, M. Al-Shaikh, and H. M. Alzoubi, "Importance of Marketing Mix Elements in Determining Consumer Purchase Decision in the Retail Market," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 12, pp. 56–72, 2021, doi: 10.4018/IJSSMET.2021110104.
- [44] G. M. Qasaimeh and H. E. Jaradeh, "THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE EFFECTIVE APPLYING OF CYBER GOVERNANCE IN JORDANIAN COMMERCIAL BANKS," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022.
- [45] B. Al Kurdi, M. Alshurideh, and T. Al afaishata, "Employee retention and organizational performance: Evidence from banking industry," *Manag. Sci. Lett.*, vol. 10, no. 16, pp. 3981–3990, 2020.
- [46] G. Ahmed and C. T. Amponsah, "Gender Differences in Entrepreneurial Attitude and Intentions: A Case of Dubai," *Proc. Ed.*, vol. 11, no. 4, pp. 315–334, 2018, [Online]. Available: https://www.researchgate.net/profile/Rudresh-Pandey-2/publication/349368995\_Consumers'\_purchase\_decision\_towards\_Private\_Label\_Brands\_An\_E mpirical\_Investigation\_for\_Select\_Indian\_Retailers/links/602d103f299bf1cc26cfa009/Consumers -purchase-decision-towards.
- [47] S. Akhtar, A., Bakhtawar, B., & Akhtar, "EXTREME PROGRAMMING VS SCRUM: A COMPARISON OF AGILE MODELS Asma Akhtar, Birra Bakhtawar, Samia Akhtar," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 80–96, 2022.
- [48] T. Eli and Lalla Aisha Sidi Hamou, "Investigating the Factors That Influence Students' Choice of English Studies As a Major: the Case of University of Nouakchott Al Aasriya, Mauritania," Int. J. Technol. Innov. Manag., vol. 2, no. 1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.62.
- [49] N. Al Amiri, R. A. Rahim, and ..., "The organizational resources and knowledge management capability: A systematic review," *Bus. Econ.* ..., vol. 15, no. 5, pp. 636–647, 2019.
- [50] B. Kurdi, M. Alshurideh, and A. Alnaser, "The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning," *Manag. Sci. Lett.*, vol. 10, no. 15, pp. 3561– 3570, 2020.
- [51] M. El Khatib, S. Al Blooshi, and A. Al-habeeb, "The Challenge and Potential Solutions of Reading Voluminous Electronic Medical Records (EMR): A Case Study from UAE," *IOSR J. Bus. Manag. (IOSR-JBM*, vol. 18, no. 12, pp. 38–46, 2016.
- [52] John Kasem and Anwar Al-Gasaymeh, "a Cointegration Analysis for the Validity of Purchasing Power Parity: Evidence From Middle East Countries," *Int. J. Technol. Innov. Manag.*, vol. 2, no.

1, p. 1, 2022, doi: 10.54489/ijtim.v2i1.60.

- [53] B. Amrani, A. Z., Urquia, I., & Vallespir, "INDUSTRY 4.0 TECHNOLOGIES AND LEAN PRODUCTION COMBINATION: A STRATEGIC METHODOLOGY BASED ON LINKS QUANTIFICATION Anne Zouggar Amrani, Ilse Urquia Ortega, and Bruno Vallespir," *Int. J. Technol. Innov. Manag. (IJTIM)*, 2(2)., vol. 2, no. 2, pp. 33–51, 2022.
- [54] M. Alshurideh *et al.*, "Fuzzy assisted human resource management for supply chain management issues," *Ann. Oper. Res.*, pp. 1–19, Jan. 2022, doi: 10.1007/s10479-021-04472-8.
- [55] M. M. El Khatib and G. Ahmed, "Management of artificial intelligence enabled smart wearable devices for early diagnosis and continuous monitoring of CVDS," *Int. J. Innov. Technol. Explor. Eng.*, vol. 9, no. 1, pp. 1211–1215, 2019, doi: 10.35940/ijitee.L3108.119119.
- [56] H. M. Alzoubi, G. Ahmed, A. Al-Gasaymeh, and B. Al Kurdi, "Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration," *Manag. Sci. Lett.*, vol. 10, no. 3, pp. 703–708, 2020, doi: 10.5267/j.msl.2019.9.008.
- [57] T. M. Ghazal *et al.*, "Performances of k-means clustering algorithm with different distance metrics," *Intell. Autom. Soft Comput.*, vol. 30, no. 2, pp. 735–742, Aug. 2021, doi: 10.32604/iasc.2021.019067.
- [58] Vorobeva Victoria, "Impact of Process Visibility and Work Stress To Improve Service Quality: Empirical Evidence From Dubai Retail Industry," *Int. J. Technol. Innov. Manag.*, vol. 2, no. 1, 2022, doi: 10.54489/ijtim.v2i1.59.
- [59] N. Ali *et al.*, "Fusion-based supply chain collaboration using machine learning techniques," *Intell. Autom. Soft Comput.*, vol. 31, no. 3, pp. 1671–1687, 2022, doi: 10.32604/IASC.2022.019892.
- [60] S. Goria, "A DECK OF CARDS TO HELP TRACK DESIGN TRENDS TO ASSIST THE," *Int. J. Technol. Innov. Manag. (IJTIM), 2(2).*, vol. 2, no. 2, pp. 1–17, 2022.
- [61] A. J. Obaid, "Assessment of Smart Home Assistants as an IoT," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 18–38, 2021, doi: 10.54489/ijcim.v1i1.34.
- [62] M. Alshurideh, R. M. d. T. Masa'deh, and B. Alkurdi, "The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation," *Eur. J. Econ. Financ. Adm. Sci.*, vol. 47, no. 47, pp. 69–78, 2012.
- [63] M. El Khatib, L. Nakand, S. Almarzooqi, and A. Almarzooqi, "E-Governance in Project Management: Impact and Risks of Implementation," *Am. J. Ind. Bus. Manag.*, vol. 10, no. 12, pp. 1785–1811, 2020, doi: 10.4236/ajibm.2020.1012111.
- [64] M. El Khatib, F. Beshwari, M. Beshwari, and A. Beshwari, "The impact of blockchain on project management," *ICIC Express Lett.*, vol. 15, no. 5, pp. 467–474, 2021, doi: 10.24507/icicel.15.05.467.
- [65] K. L. Lee, P. N. Romzi, J. R. Hanaysha, H. M. Alzoubi, and M. Alshurideh, "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 Manag.*, vol. 10, no. 2, pp. 537–550, 2022, doi: 10.5267/J.USCM.2021.11.009.
- [66] H. Alzoubi and G. Ahmed, "Do TQM practices improve organisational success? A case study of electronics industry in the UAE," *Int. J. Econ. Bus. Res.*, vol. 17, no. 4, pp. 459–472, 2019, doi: 10.1504/IJEBR.2019.099975.

- [67] M. Afifi, D. Kaira, and T. Ghazal, "Integration of collaboration systems in hospitality management as a comprehensive solution," *Int. J. Adv. Sci. Technol.*, vol. 29, no. 8s, pp. 3155–3173, 2020, [Online]. Available: http://sersc.org/journals/index.php/IJAST/article/view/16386.
- [68] M. Farouk, "The Universal Artificial Intelligence Efforts to Face Coronavirus COVID-19," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 77–93, 2021, doi: 10.54489/ijcim.v1i1.47.
- [69] E. Khatib, Z. M., R. A., and A. Al-Nakeeb, "The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE)," *Int. J. Appl. Eng. Res.*, vol. 6, p. 1, 2021.
- [70] M. El Khatib, K. Alabdooli, A. AlKaabi, and S. Al Harmoodi, "Sustainable Project Management: Trends and Alignment," *Theor. Econ. Lett.*, vol. 10, no. 06, pp. 1276–1291, 2020, doi: 10.4236/tel.2020.106078.
- [71] H. M. Alzoubi and R. Aziz, "Does Emotional Intelligence Contribute to Quality of Strategic Decisions? The Mediating Role of Open Innovation," J. Open Innov. Technol. Mark. Complex., vol. 7, no. 2, p. 130, May 2021, doi: 10.3390/joitmc7020130.
- [72] B. H. Al Kurdi and M. T. Alshurideh, "Facebook Advertising as a Marketing Tool," *Int. J. Online Mark.*, vol. 11, no. 2, pp. 52–74, 2021, doi: 10.4018/ijom.2021040104.
- [73] N. N. Alnazer, M. A. Alnuaimi, and H. M. Alzoubi, "Analysing the appropriate cognitive styles and its effect on strategic innovation in Jordanian universities," *Int. J. Bus. Excell.*, vol. 13, no. 1, pp. 127–140, 2017, doi: 10.1504/IJBEX.2017.085799.
- [74] G. Ahmed and N. Al Amiri, "An Analysis of Strategic Leadership Effectiveness of Prophet Muhammad (PBUH) Based on Dave Ulrich Leadership Code," J. Islam. Stud. Cult., vol. 7, no. 1, pp. 11–27, 2019, doi: 10.15640/jisc.v7n1a2.
- [75] S. Guergov and N. Radwan, "Blockchain Convergence: Analysis of Issues Affecting IoT, AI and Blockchain," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 1–17, 2021, doi: 10.54489/ijcim.v1i1.48.
- [76] T. M. Ghazal, R. A. Said, and N. Taleb, *Internet of vehicles and autonomous systems with AI for Medical Things*. Soft Computing, 2021.
- [77] M. Alshurideh, "Pharmaceutical Promotion Tools Effect on Physician's Adoption of Medicine Prescribing: Evidence from Jordan," *Mod. Appl. Sci.*, vol. 12, no. 11, 2018.
- [78] M. M. El Khatib and G. Ahmed, "Improving Efficiency in IBM Asset Management Software System 'Maximo': A Case Study of Dubai Airports and Abu Dhabi National Energy Company," *Theor. Econ. Lett.*, vol. 08, no. 10, pp. 1816–1829, 2018, doi: 10.4236/tel.2018.810119.
- [79] G. Ahmed, C. T. Amponsah, and S. S. Deasi, "Exploring the Dynamics of Women Entrepreneurship : A Case Study of UAE," *Int. J. Bus. Appl. Sci.*, vol. 7, no. 3, pp. 13–24, 2018.
- [80] P. S. Ghosh, S., & Aithal, "BEHAVIOUR OF INVESTMENT RETURNS IN THE DISINVESTMENT," Int. J. Technol. Innov. Manag. (IJTIM), 2(2)., vol. 2, no. 2, pp. 65–79, 2022.
- [81] M. El Khatib and A. Al Falasi, "Effects of Artificial Intelligence on Decision Making in Project Management," Am. J. Ind. Bus. Manag., vol. 11, no. 03, pp. 251–260, 2021, doi: 10.4236/ajibm.2021.113016.
- [82] M. Alshurideh, A. Gasaymeh, G. Ahmed, H. Alzoubi, and B. Al Kurd, "Loyalty program effectiveness: Theoretical reviews and practical proofs," *Uncertain Supply Chain Manag.*, vol. 8,

no. 3, pp. 599-612, 2020, doi: 10.5267/j.uscm.2020.2.003.

- [83] H. M. Alzoubi, M. Alshurideh, and T. M. Ghazal, "Integrating BLE Beacon Technology with Intelligent Information Systems IIS for Operations' Performance: A Managerial Perspective," 2021, pp. 527–538, doi: 10.1007/978-3-030-76346-6\_48.
- [84] M. Alzoubi, H., Alshurideh, M., Alkurdi, B. and Inairat, "Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context," *Uncertain Supply Chain Manag.*, vol. 8, no. 3, pp. 439– 632, 2020.
- [85] M. Alshurideh, S. A. Salloum, B. Al Kurdi, and M. Al-Emran, "Factors affecting the social networks acceptance: An empirical study using PLS-SEM approach," in ACM International Conference Proceeding Series, 2019, vol. Part F1479, pp. 414–418, doi: 10.1145/3316615.3316720.
- [86] K. L. Lee, N. A. N. Azmi, J. R. Hanaysha, H. M. Alzoubi, and M. T. Alshurideh, "The effect of digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 495–510, 2022, doi: 10.5267/j.uscm.2021.12.002.
- [87] F. Matloob *et al.*, "Software defect prediction using ensemble learning: A systematic literature review," *IEEE Access*, vol. 9, no. 1109, pp. 98754–98771, 2021, doi: 10.1109/ACCESS.2021.3095559.
- [88] E. P. Mondol, "The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, pp. 56–76, 2021, doi: 10.54489/ijcim.v1i1.30.
- [89] M. El Khatib, M. Almteiri, and S. A. Al Qasemi, "The Correlation between Emotional Intelligence and Project Management Success," *iBusiness*, vol. 13, no. 01, pp. 18–29, 2021, doi: 10.4236/ib.2021.131002.
- [90] M. Shamout, R. Ben-Abdallah, M. Alshurideh, H. Alzoubi, B. Al Kurdi, and S. Hamadneh, "A conceptual model for the adoption of autonomous robots in supply chain and logistics industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 2, pp. 577–592, 2022, doi: 10.5267/J.USCM.2021.11.006.
- [91] M. El Khatib, A. Al Jaberi, and A. Al Mahri, "Benchmarking Projects' 'Lessons Learned' through Knowledge Management Systems: Case of an Oil Company," *iBusiness*, vol. 13, no. 01, pp. 1–17, 2021, doi: 10.4236/ib.2021.131001.
- [92] T. Mehmood, H. M. Alzoubi, M. Alshurideh, A. Al-Gasaymeh, and G. Ahmed, "Schumpeterian entrepreneurship theory: Evolution and relevance," *Acad. Entrep. J.*, vol. 25, no. 4, pp. 1–10, 2019.
- [93] R. Naqvi, T. R. Soomro, H. M. Alzoubi, T. M. Ghazal, and M. T. Alshurideh, "The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 838–853, doi: 10.1007/978-3-030-76346-6\_73.
- [94] R. Yanamandra and H. M. Alzoubi, "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations," *Oper. Supply Chain Manag. An Int. J.*, vol. 15, no. 1, pp. 2579–9363, 2022.
- [95] H. M. Alzoubi and R. Yanamandra, "Investigating the mediating role of Information Sharing

Strategy on Agile Supply Chain in Supply Chain Performance," *Uncertain Supply Chain Manag.*, vol. 8, no. 2, pp. 273–284, 2020.

- [96] M. M.ElKhatib, "Knowledge Management System: Critical Success Factors and Weight Scoring Model of the Technical Dimensions," *Int. J. Appl. Inf. Syst.*, vol. 7, no. 9, pp. 6–12, 2014, doi: 10.5120/ijais14-451213.
- [97] A. Ali, A. W. Septyanto, I. Chaudhary, H. A. Hamadi, H. M. Alzoubi, and Z. F. Khan, "Applied Artificial Intelligence as Event Horizon Of Cyber Security," in 2022 International Conference on Business Analytics for Technology and Security (ICBATS, 2022, pp. 1–7, doi: 10.1109/ICBATS54253.2022.9759076.
- [98] G. Ahmed and A. Rafiuddin, "Cultural Dimensions of Economic Development: A Case of UAE," *Theor. Econ. Lett.*, vol. 08, no. 11, pp. 2479–2496, 2018, doi: 10.4236/tel.2018.811160.
- [99] M. El Khatib, A. AlMaeeni, and W. Alkamali, "The Relation between Effective Digital Program Governance and Program Success," Am. J. Ind. Bus. Manag., vol. 12, no. 09, pp. 1402–1418, 2022, doi: 10.4236/ajibm.2022.129078.
- [100] A. U. Rehman, R. M. Saleem, Z. Shafi, M. Imran, M. Pradhan, and H. M. Alzoubi, "Analysis of Income on the Basis of Occupation using Data Mining," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–4, doi: 10.1109/ICBATS54253.2022.9759040.
- [101] H. M. Alzoubi, M. In'airat, and G. Ahmed, "Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai," *Int. J. Bus. Excell.*, vol. 27, no. 1, pp. 94–109, 2022, doi: 10.1504/IJBEX.2022.123036.
- [102] K. Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, "Agile Project Management and Project Risks Improvements: Pros and Cons.," *Mod. Econ.*, vol. 13, no. 9, pp. 1157–1176, 2022.
- [103] T. M. Ghazal et al., "Securing Smart Cities Using Blockchain Technology," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896971.
- [104] E. Rehman, M. A. Khan, T. R. Soomro, N. Taleb, M. A. Afifi, and T. M. Ghazal, "Using blockchain to ensure trust between donor agencies and ngos in under-developed countries," *Computers*, vol. 10, p. 8, Aug. 2021.
- [105] H. M. Alzoubi, H. Elrehail, J. R. Hanaysha, A. Al-Gasaymeh, and R. Al-Adaileh, "The Role of Supply Chain Integration and Agile Practices in Improving Lead Time During the COVID-19 Crisis," *Int. J. Serv. Sci. Manag. Eng. Technol.*, vol. 13, no. 1, pp. 1–11, 2022, doi: 10.4018/IJSSMET.290348.
- [106] C. T. Amponsah, G. Ahmed, M. Kumar, and S. Adams, "The business effects of mega-sporting events on host cities: An empirical view," *Probl. Perspect. Manag.*, vol. 16, no. 3, pp. 324–336, 2018, doi: 10.21511/ppm.16(3).2018.26.
- [107] M. El Khatib, A. Al Hammadi, A. Al Hamar, K. Oraby, and M. Abdulaziz, "How Global Supply Chain Management Is Disrupting Local Supply Chain Management Case of Oil and Gas Industry in UAE," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 05, pp. 1067–1078, 2022, doi: 10.4236/ajibm.2022.125056.
- [108] J. Tellez et al., "AI-Based Prediction of Capital Structure: Performance Comparison of ANN SVM and LR Models," Comput. Intell. Neurosci., vol. 2022, pp. 1–13, 2022, doi: 10.1155/2022/8334927.

- [109] M. El Khatib, A. Alhosani, I. Alhosani, O. Al Matrooshi, and M. Salami, "Simulation in Project and Program Management: Utilization, Challenges and Opportunities," *Am. J. Ind. Bus. Manag.*, vol. 12, no. 04, pp. 731–749, 2022, doi: 10.4236/ajibm.2022.124037.
- [110] S. Zeeshan Zafar *et al.*, "Empirical linkages between ICT, tourism, and trade towards sustainable environment: evidence from BRICS countries," 2022, doi: 10.1080/1331677X.2022.2127417.
- [111] M. Suleman, T. R. Soomro, T. M. Ghazal, and M. Alshurideh, "Combating Against Potentially Harmful Mobile Apps," in *The International Conference on Artificial Intelligence and Computer Vision*, 2021, pp. 154–173.
- [112] A. A. Kashif, B. Bakhtawar, A. Akhtar, S. Akhtar, N. Aziz, and M. S. Javeid, "Treatment Response Prediction in Hepatitis C Patients using Machine Learning Techniques," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 79–89, Dec. 2021, doi: 10.54489/IJTIM.V1I2.24.
- [113] M. M. El Khatib, G. Ahmed, and A. Al-Nakeeb, "Enterprise Cloud Computing Project for Connecting Higher Education Institutions: A Case Study of the UAE," *Mod. Econ.*, vol. 10, no. 01, pp. 137–155, 2019, doi: 10.4236/me.2019.101010.
- [114] J. R. Hanaysha, M. E. Al-Shaikh, S. Joghee, and H. M. Alzoubi, "Impact of Innovation Capabilities on Business Sustainability in Small and Medium Enterprises," *FIIB Bus. Rev.*, vol. 12, no. 1, pp. 55–68, 2021.
- [115] H. M. Alzoubi et al., "Cyber Security Threats on Digital Banking," in 2022 1st International Conference on AI in Cybersecurity (ICAIC, 2022, pp. 1–4, doi: 10.1109/icaic53980.2022.9896966.
- [116] T. M. Ghazal, *Positioning of UAV base stations using 5G and beyond networks for IOMT applications*. Arabian Journal for Science and Engineering, 2021.
- [117] A. Alhamad *et al.*, "The effect of electronic human resources management on organizational health of telecommunications companies in Jordan," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 429– 438, 2022, doi: 10.5267/j.ijdns.2021.12.011.
- [118] M. F. Khan *et al.*, "An iomt-enabled smart healthcare model to monitor elderly people using machine learning technique," *Comput. Intell. Neurosci.*, vol. 2021, 2021, doi: 10.1155/2021/2487759.
- [119] A. Akhtar, S. Akhtar, B. Bakhtawar, A. A. Kashif, N. Aziz, and M. S. Javeid, "COVID-19 Detection from CBC using Machine Learning Techniques. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 65–78, 2021.
- [120] B. Al Kurdi, M. Alshurideh, I. Akour, E. Tariq, A. Alhamad, and H. M. Alzoubi, "The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1135–1146, 2022, doi: 10.5267/j.ijdns.2022.7.006.
- [121] T. Eli, "Students' Perspectives on the Use of Innovative and Interactive Teaching Methods at the University of Nouakchott Al Aasriya, Mauritania: English Department as a Case Study," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 90–104, Dec. 2021, doi: 10.54489/IJTIM.V1I2.21.
- [122] M. S. Aslam *et al.*, "Energy-efficiency model for residential buildings using supervised machine learning algorithm," *Intell. Autom. Soft Comput.*, vol. 30, no. 3, pp. 881–888, 2021, doi: 10.32604/iasc.2021.017920.
- [123] A. Alzoubi, "Renewable Green hydrogen energy impact on sustainability performance," *Int. J. Comput. Inf. Manuf.*, vol. 1, no. 1, p. 2021, Dec. 2021, doi: 10.54489/IJCIM.V1I1.46.

- [124] H. Alzoubi, M. Alshurideh, B. Al Kurdi, I. Akour, and R. Aziz, "Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation," *Int. J. Data Netw. Sci.*, vol. 6, no. 2, pp. 449–460, 2022, doi: 10.5267/j.ijdns.2021.12.009.
- [125] T. Mehmood, "Does Information Technology Competencies and Fleet Management Practices lead to Effective Service Delivery?," *Empir. Evid. from E-Commerce Ind.*, vol. 1, no. 2, pp. 14–41, 2021.
- [126] N. Alsharari, "Integrating Blockchain Technology with Internet of things to Efficiency," *Int. J. Technol. Innov. Manag.*, vol. 1, no. 2, pp. 01–13, Dec. 2021, doi: 10.54489/IJTIM.V1I2.25.
- [127] M. El Khatib, A. Kherbash, A. Al Qassimi, and K. Al Mheiri, "How Can Collaborative Work and Collaborative Systems Drive Operational Excellence in Project Management?," J. Serv. Sci. Manag., vol. 15, no. 03, pp. 297–307, 2022, doi: 10.4236/jssm.2022.153017.
- [128] H. M. Alzoubi, G. Ahmed, and M. Alshurideh, "An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction," *Int. J. Product. Qual. Manag.*, vol. 36, no. 2, pp. 169–186, 2022, doi: 10.1504/IJPQM.2021.10037887.
- [129] R. Bibi et al., "Edge AI-Based Automated Detection and Classification of Road Anomalies in VANET Using Deep Learning," Comput. Intell. Neurosci., vol. 2021, 2021, doi: 10.1155/2021/6262194.
- [130] H. M. Alzoubi, M. T. Alshurideh, B. Al Kurdi, K. M. K. Alhyasat, and T. M. Ghazal, "The effect of e-payment and online shopping on sales growth: Evidence from banking industry," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1369–1380, 2022, doi: 10.5267/j.ijdns.2022.5.014.
- [131] D. Miller, "The Best Practice of Teach Computer Science Students to Use Paper Prototyping. International Journal of Technology," *Innov. Manag. (IJTIM)*, vol. 1, no. 2, pp. 42–63, 2021.
- [132] M. El Khatib, "BIM as a tool to optimize and manage project risk management," *Int. J. Mech. Eng.*, vol. 7, no. 1, pp. 6307–6323, 2022.
- [133] M. T. Alshurideh, B. Al Kurdi, H. M. Alzoubi, B. Obeidat, S. Hamadneh, and A. Ahmad, "The influence of supply chain partners' integrations on organizational performance: The moderating role of trust," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1191–1202, Sep. 2022, doi: 10.5267/J.USCM.2022.8.009.
- [134] S.-W. Lee *et al.*, "Multi-Dimensional Trust Quantification by Artificial Agents Through Evidential Fuzzy Multi-Criteria Decision Making," *IEEE Access*, vol. 9, pp. 159399–159412, 2021.
- [135] S. Y. Siddiqui *et al.*, "IoMT Cloud-Based Intelligent Prediction of Breast Cancer Stages Empowered with Deep Learning," *IEEE Access*, vol. 9, pp. 146478–146491, 2021, doi: 10.1109/ACCESS.2021.3123472.
- [136] B. Al Kurdi, M. Alshurideh, I. Akour, H. M. Alzoubi, B. Obeidat, and A. Alhamad, "The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets," *Int. J. Data Netw. Sci.*, vol. 6, no. 4, pp. 1175–1185, 2022, doi: 10.5267/j.ijdns.2022.7.002.
- [137] M. M. El Khatib et al., "Digital Transformation and SMART-The Analytics factor," in 2022 International Conference on Business Analytics for Technology and Security, ICBATS 2022, 2022, pp. 1–11, doi: 10.1109/ICBATS54253.2022.9759084.
- [138] M. A. Khan, "Challenges Facing the Application of IoT in Medicine and Healthcare," Int. J.

Comput. Inf. Manuf., vol. 1, no. 1, pp. 39-55, 2021, doi: 10.54489/ijcim.v1i1.32.

[139] B. Al Kurdi, H. M. Alzoubi, I. Akour, and M. T. Alshurideh, "The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry," *Uncertain Supply Chain Manag.*, vol. 10, no. 4, pp. 1111–1116, 2022, doi: 10.5267/j.uscm.2022.9.001.