

THE IMPACT OF SERVICE QUALITY AND SERVICE TRANSPARENCY ON CUSTOMER SATISFACTION

Muhammad Turki Alshurideh¹, Wasfi, A. Alrawabdeh², Barween Al Kurdi³, Ali A. Alzoubi⁴

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

² *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*

³ *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*

⁴ *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.*

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 rely 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 high-income 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 only can be achieved when business organizations set the goals that is only focus on 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 through their satisfaction and good quality services that become the core need of 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

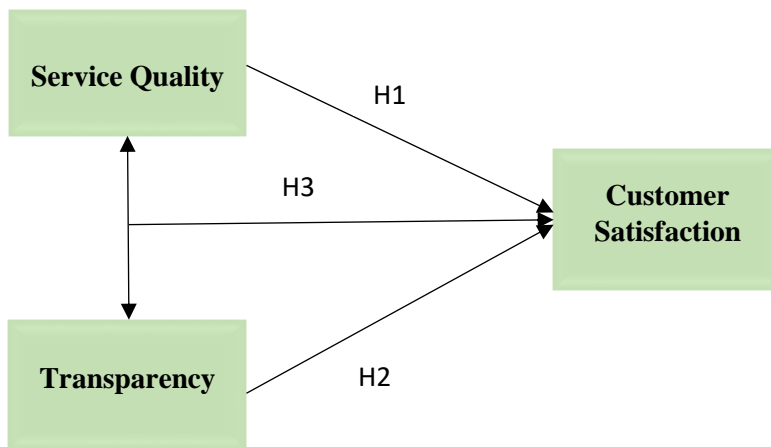


Figure 1: Conceptual Research Model

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

- [1] 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 e-learning 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 intentions 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. Gorla, "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 Ameer, 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_Empirical_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.redi-bw.de/db/ebsco.php/search.ebscohost.com/login.aspx%3Fdirect%3Dtrue%26db%3Dbuh%26AN%3D151548527%26site%3Ddehost-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/IJEER.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. Almujaeni, 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. Opuencia, "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.*,

- vol. 9, no. 3, pp. 3499–3503, 2020, Accessed: Sep. 15, 2022. [Online]. Available: www.ijstr.org.
- [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. Almujaeni, 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/ijesed.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. Hamadne, 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. Almtairi, 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. AlMaeni, 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 Jaber, 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. 418–428, 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 Gaussian 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://sersec.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.