








# The Role of Governance, Leadership in Public Sector Organizations: A Case Study in the UAE

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**Abstract.** Leadership, governance, and management are among the most prominent components of an organization. These components contribute to adopting new trends and dealing effectively with the challenges by introducing, designing, and practically implementing the organizational strategies to improve productivity. This study also highlighted the role of leadership, governance, and management in accelerating organizational productivity. The researcher also proposed a potential mediation of organizational strategies in improving productivity. To empirically investigate the proposed relationship between study variables, the researcher gathered data from  $n = 230$  individuals currently working in the UAE-based private telecom companies. Findings indicated that leadership, governance, and management are significantly playing their role to improve productivity. However, results also showed a mediating role of Organizational Strategies as indirectly affecting the relationship between leadership, governance, management, and improved productivity and strengthening these relationships at maximum level. Thus, the researcher concludes that governance, management, and leadership are the regulating agents of an organization. Here, the role of strategies is of greater significance as they help an organization accelerate its growth, serve the interests of organizational members, reduce the risks, increase productivity, and help an organization to achieve competitive advantages.

**Keywords:** Organizational strategies · UAE · Governance · Management · Leadership

## 1 Introduction

Increased organizational challenges in both national and international level business arenas question the survival of an organization in the best possible manner. In this regard, increased productivity is the first and foremost consideration, that ensures the survival of an organization [1, 2]. According to Kumar et al. (2016), our living standards and wealth can be determined directly by our product development process. Today, improving organizational productivity is one of the mainly focused goals of every organization. The primary reason behind the utmost importance to improved productivity is maximum

individual and collective benefits for all the involved parties. For example, improved productivity leads to an increased work performance that eventually brings out prominent economic growth and social progress [4]. Besides, improved organizational productivity also provides the workforce with improved working conditions, better salaries, increments, and support from the organizational stakeholders and leaders [5]. Improved productivity also enhances organizational competitive advantage through improved quality output and cost reduction [6–8]. Besides, improved organizational productivity also works as a positive and progressive change in work management, organization, and production. These changes mainly involve improving the control systems, the widespread development and recognition of automated control systems, personal and technical training of the workforce, improvement of ancillary units, and improved labor and distribution cooperation [9]. Thus, all these factors have made organizational productivity worthy of attention. Therefore, looking at its antecedents is very important to ensure organizational survival and long-term success [4, 10]. Now both private and public sector enterprises focus on their productivity as it also contributes to poverty reduction and improving living standards [3]. However, certain factors provide a direct pathway to improve the organization's productivity such as strategic management, leadership, organizational governance, policies, and workplace environment [11, 12]. Desjardins (2017) highlights the role of leadership and its focus towards leadership tasks that further improve the workforce performance. Similarly, good practices in governance and management indicated idealistic attributes to sustain better work performance and increase organizational productivity [14]. For example, the private healthcare sector in the United Arab Emirates is famous for its strategic management and employees' friendly policies, which are liable for increased organizational performance and productivity. Here besides getting an advantage from local and foreign healthcare experts, the organizational stakeholders also facilitate their workforce by proposing improved policies and successful execution of strategies [15]. As a result, today the United Arab Emirates is a hub of business stakeholders, where private organizations provide equal opportunities to all and significantly contributing to the economic development of the whole Middle Eastern region [15]. Once again, this gigantic privatization of business organizations in the United Arab Emirates is due to internal cooperation, aimed at mutual benefits providing socio-economic benefits at the collective level [16].

Hence by keeping in view the above-mentioned factors in improving organizational productivity, this study aims to assess the direct link between governance, management, and leadership for improved organizational productivity [17, 18]. Considerably, many studies focused on these three factors (individually) to assess their impacts, yet the literature indicates a gap where all these factors will be unified in a single investigation. The researcher empirically investigated the above-mentioned link, however, the aim is to provide in-depth details by focusing on the role of strategies when assuming a potential relationship between governance, management, leadership, and improved organizational productivity.

## 2 Literature Review and Hypotheses Development

### 2.1 Governance and Improved Productivity

Governance is a central topic of attention in both developed and emerging economies. For organizational stakeholders, governance is a crucial factor to accelerate the growth and development of the private sector along with the spillover effects to the local economy. To improve governance, several changes in organizational policies and practical strategies are introduced in many countries [19]. Previous studies have introduced four primary factors that affect and boost governance which in turn positively affect the economic and social growth of an organization. These factors involve (i) role of human capital in increasing organizational efficiency, (ii) altering or modifying the existing organizational policies, (iii) in-depth understanding of the market challenges, and (iv) ownership in determining the strengths and weakness of the organization [20]. To take these factors under consideration and their practical implementation, organizational governance is the main authority. To further validate the role of governance in bringing out increased productivity Liu et al. (2018) cited an example of the Chinese economy that has remarkably increased in the year 2018. According to Liu et al. (2018), an increased GDP implies that the Chinese private sector has greatly transformed from low income to upper-middle-income enterprises, indicating governance quality as the primary component for accelerating organizational productivity. Therefore, economists and organizational researchers agree that governance is the critical factor explaining organizational productivity. Especially, during the early stages of organizational development, governance plays an important role to sustain the organizational infrastructure on strong foundations [22].

**H1:** There is a significant relationship between governance and increased productivity

### Management and Improved Productivity

Previous studies that assessed the impacts of management on organizational growth have witnessed management practices as mainly affecting organizational performance and productivity. Existing literature emphasizes much on raising and sustaining the firm performance through a special consideration on management [23]. Strong management ensures competitive advantage as they are the direct means through which an organization can develop, and execute non-substitutable and non-imitable human capital. Many studies also highlighted the importance of management in an organization, although every organization has its structure, design, and budget to focus on the development of management [24]. A survey conducted by Reenen and Bender (2016) also affirmed the role of management in accelerating organizational performance and productivity in Germany. Results showed that better-managed firms follow a systematic process for workforce recruitment and retaining the higher average human capital. These findings also indicated a strong significant relationship between management practices and firm-level productivity. Ngwenya and Aigbavboa (2017) also cited a relevant example to further maintain a strong link between management and increased productivity in the South

African construction sector. According to the researchers, despite managing the workforce is a little different than managing technology or workplace environment, management is the fundamental component that ensures organizational success, development, and increased output.

**H2:** There is a significant relationship between management and increased productivity

### **Leadership and Improved Productivity**

Along with the major changes in the organizational trends, today we need stronger, democratic, focused, and less bureaucratic leadership. Indeed, leadership is one of the primary factors that ensure the survival and progress of an organization. The importance of leadership can be determined by a fact that it has a strong, optimistic effect on organizational productivity. Ultimately, we can find leadership as the critical factor that practically executes the organizational strategies to meet the desired goals and fulfill the objectives [27]. According to Tewari et al. (2019), this prominent relationship between leadership and increased organizational productivity is due to a psychological contract between the leaders and workforce to meet the desired organizational goals. As the more a leader shows flexibility and effectiveness in their leadership patterns, the more workforce will likely to perform accordingly. Consequently, this psychological contract will bring out positive constructive outcomes.

As noted by Madaan (2015), the purpose of choosing a leader is to affect the organizational environment and motivate the workforce for better performance. A leader has different qualities that persuade, motivate and support the workforce to perform organizational functions. Besides, leadership also contains skills and expertise that help to solve complex organizational problems, understanding a particular subject, and improving organizational productivity. Therefore, organizational productivity and success primarily depend on its leadership as leaders use different professional skills to enhance excellence and improve productivity [30, 31].

**H3:** There is a significant relationship between leadership and increased productivity

### **Organizational Strategies, Governance, Management, Leadership and Improved Productivity**

According to Nenadál et al. (2018), organizations today need to focus on creating new approaches that can contribute to organizational development. These approaches should be strategic and based on both long-term and short-term benefits for all. These strategies not only ensure practical execution but also are based on increasing organizational productivity at the maximum level. Organizational strategies are one of the most enduring concerns, as they provide a direct pathway to achieve the desired organizational goals. These strategies are aimed at every aspect and every individual in an organizational hierarchical structure [33, 34].

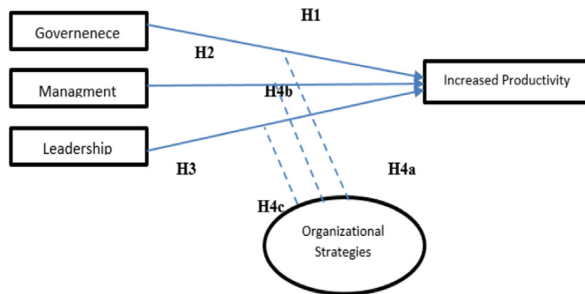
A report represented by the United Nations Industrial Development Organization (2010) further discussed the intervening role of organizational strategies in advancing

productivity. As argued that, if the stakeholder focuses on increased productivity, they have to keep the governance, management, and leadership for designing and implementing the organizational strategies under consideration. For this purpose, annual evaluations can significantly help as organizations want both internal and external assessments. As governance considers the incremental and instrumental organizational goals, achieving these goals require a strong strategic plan. Once a plan is designed, managers ensure their practical value and further obligate the leaders to execute them. As a result, organization attains sustainable development, organizational productivity, and social-economic prosperity [35, 36]. For this purpose, Pacheco et al. (2014) highlighted some organizational strategies i.e., oriented approach for the product development, modification of existing products, improvement of bottleneck, reconsideration from the ergonomic point, and reconsidering the functions like logistic boarding, as a pathway to increase the organizational productivity. However, it is also worthwhile to notable that, these strategies are a collection of improvements aimed at the organizational workforce, organizational environment, working conditions, and decision-making that can enhance productivity by all possible means [38] (Fig. 1).

**H4a:** Organizational strategies mediate the relationship between governance and increased productivity

**H4b:** Organizational strategies mediate the relationship between management and increased productivity

**H4c:** Organizational strategies mediate the relationship between leadership and increased productivity



**Fig. 1.** Conceptual model of the study

### 3 Research Methods

The researcher employed the cross-sectional design in this research and used structured questionnaires with Five-point Likert scale items (Strongly disagree, disagree, neutral, agree, strongly disagree) [39–43]. However, as the study contain a self-proposed conceptual model, the researcher preferred using Structural Equation Modelling to conduct

an in-depth analysis of the proposed relationship between all the study variables. In this regard, the researcher used both Statistical Package for Social Sciences and IBM AMOS Version 23.

Moreover, to select the study sample, we used the convenience sampling technique and selected a sample of  $n = 230$  individuals working in the private telecom sector in the United Arab Emirates [44]. We mainly selected the participants from the Governance, Human Resource, and workforce leaders from  $n = 3$  telecom companies working in Abu Dhabi and Ajman. After data collection, we assessed the internal consistency of the research model by examining the reliability and validity as suggested by Alhumaid et al. (2021). We first examined the Construct Reliability and Convergent validity of the research model (see Table 1). We can observe that all the Cronbach Alpha values are ranging from .732 to .894. Similarly, all the Composite Reliability values are ranging from .702 to .904, indicating that all the obtained CR and CA values are successfully establishing the Construct Reliability of the research model as they are higher than the threshold value of 0.7. Moreover, regarding the Convergent Validity, we can observe that all the Factor Loading and Average Variance Extracted values (ranging from .741 to .894) are also higher than the threshold value of 0.5, indicating that Convergent Validity is also established [46, 47].

**Table 1.** Construct reliability and convergent validity of research model

Variables	Items	FL	AVE	CA	CR
Governance	GOV1	.985	.792	.805	.786
	GOV2	.762			
	GOV3	.629			
Management	MGT1	.643	.741	.732	.702
	MGT2	.883			
	MGT3	.700			
Leadership	LDP1	.629	.819	.728	.822
	LDP2	.942			
	LDP3	.888			
Increased productivity	IPY1	.816	.894	.761	.904
	IPY2	.976			
	IPY3	.881			
Organizational strategies	OTS1	.985	.825	.746	.825
	OTS2	.762			
	OTS3	.729			

After assessing the construct reliability and convergent validity, the researchers scrutinized the divergent validity of the research model as suggested by [1, 48, 49]. For this purpose, we used two criterion scales including Fornell-Larcker Scale and the

Heterotrait-Monotrait Ratio Scale [50, 51]. We can observe that all the square root values of Average Variance Extracted are higher than the correlation values, indicating that the discriminant validity is partially established (See Table 2). Besides, after applying the Heterotrait-Monotrait Ratio Formula, we found the HTMT value at .592, which is lower than the threshold value of 0.85, indicating that the discriminant validity is also established (Table 3).

**Table 2.** Fornell-Larcker scale

	GOV	MGT	LDP	IPY	OTS
GOV	<b>.627</b>				
MGT	.601	<b>.549</b>			
LDP	.521	.516	<b>.670</b>		
IPY	.534	.525	.497	<b>.799</b>	
OTS	.286	.191	.275	.472	<b>.680</b>

**Table 3.** Heterotrait-Monotrait ratio scale

	GOV	MGT	LDP	IPY	OTS
GOV					
MGT	.561				
LDP	.927	.460			
IPY	.960	.469	.919		
OTS	.217	.193	.163	.179	.279

After determining the internal consistency of the research model, the researcher conducted a descriptive analysis of the research participants. Table 4 indicates a summary of demographical data. We can see that a majority of respondents (61.7%) were males and 38.3% were females ( $M = 1.39$ ,  $SD = .488$ ). Furthermore, 43.9% of participants were 36 to 45 years old, 21.3% were 26 to 35 years old, 20.8% were 46 years of age or above, and only 13.9% were below 25 years of age ( $M = 3.19$ ,  $SD = 2.124$ ). Similarly, according to the qualification level of participants, 38.6% were having graduation degrees, 31.7% were undergraduate individuals, 25.7% of participants were holding professional diplomas or certification, and only 2.2 of respondents were having a postgraduate degree ( $M = 2.33$ ,  $SD = 2.127$ ). Finally, 32.6% of respondents were having work experiences of eight years or above, 27.8% were having 6 to 8 years of professional experience, 21.3% of respondents were having 2 to 5 years of experience, and 18.3% of participants were having work experience of less than one year ( $M = 2.75$ ,  $SD = 1.010$ ).

**Table 4.** Demographics of respondents

Variable	Constructs	<i>f</i>	%
Gender	Male	142	61.7%
	Female	88	38.3%
Age	Below 25 years	32	13.9%
	26–35	49	21.3%
	36–45	101	43.9%
	46 or above	48	20.8
Qualification	Undergraduate	73	31.7%
	Graduate	89	38.6%
	Post-graduation or above	5	2.2%
	Diploma/Certification	59	25.7%
Work experience	Less than 1 year	42	<b>18.3%</b>
	2–5 years	49	<b>21.3%</b>
	6–7 years	64	<b>27.8%</b>
	8 years or above	75	32.6%

**Coefficients of Determination R<sup>2</sup> and Hypotheses Testing: Path, Mediation Analysis, Regression Analysis**

The researcher examined the Coefficients of determination R<sup>2</sup> to assess the predictive value of the research model as suggested by [52]. The R<sup>2</sup> values are showing a strong predictive power as the values of latent variables are ranging from .617 to .848. Table 5 contains the summary of the relevant analysis:

**Table 5.** Coefficients of determination R<sup>2</sup>

Variables	R <sup>2</sup> value
Governance	.848
Management	.617
Leadership	.712

Furthermore, the researcher conducted path and linear regression analyses to validate the proposed relationship between study variables. Table 6 summarizes the relevant results. As visible that, with the path values at .669, we found the relationship between Governance and Increased Productivity as statistically significant ( $b = .927, p \geq .000$ ). Similarly, with the Path values at .413, we also affirm a significant relationship between Management and Increased Productivity ( $b = .984, p \geq .000$ ). Finally, the relationship



between Leadership and Increased Productivity is also significant at the Path value of .298, indicating that the third study hypothesis is also accepted ( $b = .537, p \geq .000$ ).

**Table 6.** Path analysis and linear regression analysis.

H	Relationship	Path	<i>t</i>	Sign.
H1	GOV > IPY	.669***	.265.10	.000
H2	MGT > IPY	.413**	64.17	.000
H3	LDP > IPY	.298*	123.02	.000

Similarly, the study also contains mediating effect of the Organizational Strategies on all the relationships proposed between Governance, Management, Leadership, and Increased Productivity, the research also examined the relevant mediating effect. Table 7 represents the results of the mediation analysis. We can observe that, with the significance level of  $p \geq .000$  and the indirect effect value of .008, Organizational Strategies are significantly mediating the relationship between Governance and Increased Productivity. The significance level at  $p \geq .000$  and indirect value of .023, Organizational Strategies are also mediating the relationship between Management and Increased Performance. Finally, the mediating role of Organizational Strategies is again validated as the significance value is  $p \geq .000$  with the indirect effect value of .144 indicating a significant mediating role of Organizational Strategies in the relationship between Leadership and Increased Productivity.

**Table 7.** Mediation, path and regression analyses

<i>H</i>	Relationship	Path	Indirect effect	Sign.
H4a	GOV > OTS > IPY	.221, -.171***	.008	.000
H4b	MGT > OTS > IPY	.432–1.245*	.023	.058
H4c	LDP > OTS > IPY	.268–.580*	.144	.000

According to de Waal and Frijns (2016), existing literature much encourages better business opportunities for the investors in the United Arab Emirates. Both the economic and social stability of the UAE is the basic reason behind increased business opportunities in the countries. Here the role of organizational managers, governance, and other workforce members is distinguished as they are satisfied with the working conditions that practically suit them [16, 54]. This research also examined the organizational success in terms of the members that actively make workable plans and ensure their execution in the best possible manner [18]. First, we found a significant relationship between Governance and Improved Productivity in the UAE. These results show a strong consistency with the study conducted by Liu et al. (2018), as they found similar organizational excellence in Chinese organizations due to strong governance ( $p \geq .000$ ).

Besides, the relationship between Management and Increased productivity ( $p \geq .000$ ) is also consistent with the research carried out by Reenen and Bender (2016) as they also concluded Management is one of the fundamental agents of bringing out organizational stability and improved productivity. Thirdly, the relationship between Leadership and Improved Productivity showed significant compatibility ( $p \geq .000$ ) with the research conducted by Tewari et al. (2019) as they found that the relationship between Management and Improved Productivity is due to a psychological contract in which, all the involved parties work on the principle of “Reward and Cost”. Lastly, the role of Organizational Strategies to Mediate the previously mentioned three relationships, is also consistent with the study conducted by Pacheco et al. (2014), as they found all the organizational members as improving productivity through introducing, designing, and implementing the Organizational Strategies. Thus, the primary goal of an organization is to unite different individuals in a group to attain mutual goals for mutual benefits. Since organizations are viewed as a system, Governance, management, and leadership are the regulating agents of the relevant system [24]. In this regard, the role of strategies is of greater significance as they help an organization to accelerate its growth, serve the interests of organizational members, reduce the risks, increasing productivity, and help an organization to achieve competitive advantages [55].

## References

1. Alghizzawi, M., Habes, M., Salloum, S.A.: The relationship between digital media and marketing medical tourism destinations in Jordan: Facebook perspective. In: Hassanien, A.E., Shaalan, K., Tolba, M.F. (eds.) AISI 2019. AISC, vol. 1058, pp. 438–448. Springer, Cham (2020). [https://doi.org/10.1007/978-3-030-31129-2\\_40](https://doi.org/10.1007/978-3-030-31129-2_40)
2. Sacomano, P.A.F., Benedito, J.B.S.: Operações E Gestão Estratégica Da Produção (2007). <https://www.amazon.com.br/>
3. Kumar, S., Duhan, M., Haleem, A.: Evaluation of factors important to enhance productivity. Cogent Eng. **3**(1), 1145043 (2016). <https://doi.org/10.1080/23311916.2016.1145043>
4. Hanaysha, J.: Improving employee productivity through work engagement: evidence from higher education sector. Manag. Sci. Lett. **6**(1), 61–70 (2016). <https://doi.org/10.5267/j.msl.2015.11.006>
5. Osborne, S., Hammoud, M.S.: Effective employee engagement in the workplace. Int. J. Appl. Manag. Technol. **16**(1), 4 (2017). <https://doi.org/10.5590/ijamt.2017.16.1.04>
6. Habes, M., Alghizzawi, M., Elareshi, M., Ziani, A., Qudah, M., Al Hammadi, M.M.: E-marketing and customers’ bank loyalty enhancement: Jordanians’ perspectives. In: Hamdan, A., Shoaib, H.M., Alareeni, B., Hamdan, R. (eds.) The Implementation of Smart Technologies for Business Success and Sustainability. Studies in Systems, Decision and Control, vol. 216, pp 37–47. Springer, Cham (2023). [https://doi.org/10.1007/978-3-031-10212-7\\_4](https://doi.org/10.1007/978-3-031-10212-7_4)
7. Al-Samirae, Z., Alshibly, M.S., Alghizzawi, M.: Excellence in drawing up marketing mix strategies for small and medium enterprises (SMEs) and their impact on the marketing performance. Bus. Manag. Econ. Res. **6**(3), 30–36 (2020). <https://doi.org/10.32861/bmer.63.30.36>
8. Hill, C.W., Jones, G.R., Schilling, M.A.: Strategic Management: Theory & Cases: An Integrated Approach, p. 2014. Cengage Learning, Boston (2014)
9. Myronenko, Y.: Productivity – measurement and improvement. 149, 1–31 (2012)

10. Rahi, S., Alghizzawi, M., Ishtiaq, M., Ngah, A., Mehta, A.M.: Examining consumer behaviour towards continuance use of mobile shopping apps with the integration of expectation confirmation theory and flow theory. *Int. J. Bus. Inf. Syst.* 2–24 (2022)
11. Oeij, P.R.A., De Looze, M.P., Ten Have, K., Van Rhijn, J.W., Kuijt-Evers, L.F.M.: Developing the organization's productivity strategy in various sectors of industry. *Int. J. Product. Perform. Manag.* **61**(1), 93–109 (2011). <https://doi.org/10.1108/17410401211187525>
12. C. Books: 22 ways to improve productivity in the workplace (2015)
13. Desjardins, C.: *J. Appl. Leadersh. Manag.* (2017)
14. United Nations Industrial Development Organization: *Management and governance practices* (2010)
15. Mohamed, M.S., Khalifa, G.S., Nusari, M., Ameen, A., Al-Shibami, A.H., Abu-Elhassan, A.E.: Effect of organizational excellence and employee performance on organizational productivity within healthcare sector in the UAE. *J. Eng. Appl. Sci.* **13**(15), 6199–6210 (2018). <https://doi.org/10.3923/jeasci.2018.6199.6210>
16. Al-Raisi, A., Amin, S., Tahir, S.: Evaluation of e-performance analysis and assessment in the United Arab Emirates (UAE) organizations. *J. Internet Inf. Syst.* **2**(2), 20–27 (2011)
17. Al-Marooif, R.S., Alhumaid, K., Alhamad, A.Q., Aburayya, A., Salloum, S.: User acceptance of smart watch for medical purposes: an empirical study. *Future Internet* **13**(5), 127 (2021). <https://doi.org/10.3390/fi13050127>
18. Al Aina, R., Atan, T.: The impact of implementing talent management practices on sustainable organizational performance. *Sustainability* **12**(20), 8372 (2020). <https://doi.org/10.3390/su12208372>
19. Gaitan Riaño, S.C., Herrera-Echeverry, H., Pablo, E.: Corporate governance and its effect on productivity under different business environments: evidence from Latin America. *SSRN Electron. J.* (2018). <https://doi.org/10.2139/ssrn.3003627>
20. Köke, J.: Does good corporate governance lead to stronger productivity growth? Evidence from market-oriented and blockholder-based governance regimes does good corporate governance lead to stronger productivity growth? (2002)
21. Liu, J., Tang, J., Zhou, B., Liang, Z.: The effect of governance quality on economic growth: based on China's provincial panel data. *Economies* **6**(4), 1–23 (2018). <https://doi.org/10.3390/economies6040056>
22. Khan, M.H.: Governance, economic growth and development since the 1960s. *DESA Work. Pap.* **54**, 1–22 (2007)
23. Siebers, P.O., et al.: Enhancing productivity: the role of management practices. *SSRN Electron. J.* (2011). <https://doi.org/10.2139/ssrn.1309605>
24. Shafter, M.E., Ghnaem, S.S., Abdelmotleb, F.A.: The roles of management to increase efficiency for employees and interconnected with good leadership. *IOSR J. Bus. Manag.* **18**(11), 8–14 (2016). <https://doi.org/10.9790/487X-1811010814>
25. Reenen, V., Bender, S.: IAB Discussion Paper selection, and productivity (2016)
26. Ngunyena, L., Aigbavboa, C.: Improvement of productivity and employee performance through an efficient human resource management practices. In: Kantola, J.L., Barath, T., Nazir, S., Andre, T. (eds.) *Advances in Human Factors, Business Management, Training and Education*. AISC, vol. 498, pp. 727–737. Springer, Cham (2017). [https://doi.org/10.1007/978-3-319-42070-7\\_67](https://doi.org/10.1007/978-3-319-42070-7_67)
27. Oladipo, K.S., Jamilah, O.A.Y., Mohammed, A., Navges, K.: Relationship between leadership and employee productivity in an organization. *J. Bus. Manag.* **9**(4), 62–66 (2013). <https://doi.org/10.9790/487x-0946266>
28. Tewari, S., Gujarathi, R., Madulety, K.: Leadership styles and productivity. *Asian Soc. Sci.* **15**(4), 115 (2019). <https://doi.org/10.5539/ass.v15n4p115>
29. Madaan, S.: Impact of leadership on employees productivity. *Int. J. Eng. Technol. Sci. Res.* **2**(11), 134–138 (2015)

30. Shafiu, A.M., Manaf, H.A., Muslim, S.: The impact of leadership on organizational performance. *Int. J. Recent Technol. Eng.* **8**(3), 7573–7576 (2019). <https://doi.org/10.35940/ijrte.c6158.098319>
31. Elareshi, M., Habes, M., Al-Tahat, K., Ziani, A., Salloum, S.A.: Factors affecting social TV acceptance among Generation Z in Jordan. *Acta Psychol.* **230**, 103730 (2022)
32. Nenadál, J., Vykydal, D., Waloszek, D.: Organizational excellence: approaches, models and their use at Czech organizations. *Qual. Innov. Prosper.* **22**(2), 47–64 (2018). <https://doi.org/10.12776/qip.v22i2.1129>
33. Habes, M., Elareshi, M., Youssef, E., Ali, S., Qudah, M.: Social impact of videos at new media platforms on the elearning acceptance during the Covid-19. *Inf. Sci. Lett.* **11**(3), 913–923 (2022)
34. Aoun, C.G., Lagadec, L., Habes, M.: An extended modeling approach for marine/deep-sea observatory. In: Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds.) *The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA 2022)*. LNDECT, vol. 113, pp. 502–514. Springer, Cham (2022). [https://doi.org/10.1007/978-3-031-03918-8\\_42](https://doi.org/10.1007/978-3-031-03918-8_42)
35. Mosiac: Organisational Governance (2010)
36. Salloum, S.A., Al-Emran, M., Khalaf, R., Habes, M., Shaalan, K.: An innovative study of e-payment systems adoption in higher education: theoretical constructs and empirical analysis. *Int. J. Interact. Mob. Technol.* **13**(6) (2019)
37. Pacheco, D., Pergher, I., Jung, C.F., ten Caten, C.S.: Strategies for increasing productivity in production systems. *Indep. J. Manag. Prod.* **5**(2), 344–359 (2014). <https://doi.org/10.14807/ijmp.v5i2.134>
38. Robinson, D.D.: Using succession strategies to increase workplace productivity. Doctoral dissertation, Walden University (2018)
39. Habes, M., Elareshi, M., Almansoori, A., Ziani, A., Alsridi, H.: Smart interaction and social TV used by Jordanian university students. *Technol. Soc.* **71**, 102110 (2022)
40. Habes, M., Ali, S., Pasha, S.A.: Statistical package for social sciences acceptance in quantitative research: from the technology acceptance model’s perspective. *FWU J. Soc. Sci.* **15**(4), 34–46 (2021). <https://doi.org/10.51709/19951272/Winter-2021/3Statistical>
41. Elareshi, M., Habes, M., Ziani, A.-K.: New media users’ awareness of online inflammatory and mobilisation methods for radical and extreme activities. *Ilkog. Online* **20**(5), 5567–5576 (2021)
42. Habes, M., Alghizzawi, M., Salloum, S.A., Mhamdi, C.: Effects of Facebook personal news sharing on building social capital in Jordanian universities. In: Al-Emran, M., Shaalan, K., Hassanien, A.E. (eds.) *Recent Advances in Intelligent Systems and Smart Applications*. SSDC, vol. 295, pp. 653–670. Springer, Cham (2021). [https://doi.org/10.1007/978-3-030-47411-9\\_35](https://doi.org/10.1007/978-3-030-47411-9_35)
43. Krosnick, J.A.: Survey research. *Annu. Rev. Psychol.* **50**, 537–567 (1999). <https://doi.org/10.1146/annurev.psych.50.1.537>
44. In’nami, Y., Koizumi, R.: Review of sample size for structural equation models in second language testing and learning research: a Monte Carlo approach. *Int. J. Test.* **13**(4), 329–353 (2013). <https://doi.org/10.1080/15305058.2013.806925>
45. Alhumaid, K., Habes, M., Salloum, S.A.: Examining the factors influencing the mobile learning usage during COVID-19 pandemic: an integrated SEM-ANN method. *IEEE Access* **9**(1), 02567–102578 (2021)
46. Habes, M., Ali, S., Salloum, S.A., Elareshi, M., Ziani, A.K.: Digital media and students’ AP improvement: an empirical investigation of social TV. In: *2020 International Conference on Innovation and Intelligence for Informatics, Computing and Technologies (3ICT)*, pp. 1–6. IEEE (2020)

47. Mohajan, H.K.: Two criteria for good measurements in research: validity and reliability. *Ann. Spiru Haret Univ. Econ. Ser.* **17**(4), 59–82 (2017). <https://doi.org/10.26458/1746>
48. Salloum, S.A., AlAhbabi, N.M.N., Habes, M., Aburayya, A., Akour, I.: Predicting the intention to use social media sites: a hybrid SEM-machine learning approach. In: Hassanien, A.-E., Chang, K.-C., Mincong, T. (eds.) *AMLTA 2021. AISC*, vol. 1339, pp. 324–334. Springer, Cham (2021). [https://doi.org/10.1007/978-3-030-69717-4\\_32](https://doi.org/10.1007/978-3-030-69717-4_32)
49. Al-Shibly, M.S., Alghizzawi, M., Habes, M., Salloum, S.A.: The impact of de-marketing in reducing Jordanian youth consumption of energy drinks. In: Hassanien, A.E., Shaalan, K., Tolba, M.F. (eds.) *AISI 2019. AISC*, vol. 1058, pp. 427–437. Springer, Cham (2020). [https://doi.org/10.1007/978-3-030-31129-2\\_39](https://doi.org/10.1007/978-3-030-31129-2_39)
50. Salloum, S.A., Al-Emran, M., Habes, M., Alghizzawi, M., Ghani, M.A., Shaalan, K.: Understanding the impact of social media practices on e-learning systems acceptance. In: Hassanien, A., Shaalan, K., Tolba, M. (eds.) *Proceedings of the International Conference on Advanced Intelligent Systems and Informatics (AISI 2019). AISC*, vol. 1058, pp. 360–369. Springer, Cham (2020). [https://doi.org/10.1007/978-3-030-31129-2\\_33](https://doi.org/10.1007/978-3-030-31129-2_33)
51. Habes, M., Salous, M.H., Al Jwaniat, M.I.: Applying the uses and gratifications theory to college major choice using social networks online video. In: Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds.) *The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022). LNDECT*, vol. 113, pp. 388–400. Springer, Cham (2022). [https://doi.org/10.1007/978-3-031-03918-8\\_33](https://doi.org/10.1007/978-3-031-03918-8_33)
52. Tryfos, P.: Sampling methods for applied research. *Text Cases*, p. 440 (1996)
53. de Waal, A., Frijns, M.: The influence of the UAE context on management practice in UAE business. *Int. J. Islam. Middle East. Financ. Manag.* **9**(2), 236–253 (2016). <https://doi.org/10.1108/IMEFM-01-2015-0012>
54. Habes, M., Ali, S., Qamar, A., Elareshi, M., Ziani, A., Alsriddi, H.: Public service advertisements and healthcare attitudinal changes in developing countries: Pakistanis' perspectives. In: Alareeni, B., Hamdan, A. (eds.) *Explore Business, Technology Opportunities and Challenges After the Covid-19 Pandemic (ICBT 2022). LNNS*, vol. 495, pp. 433–442. Springer, Cham (2023). [https://doi.org/10.1007/978-3-031-08954-1\\_40](https://doi.org/10.1007/978-3-031-08954-1_40)
55. Chaudhary, R., Rangnekar, S., Barua, M.K.: Organizational climate, climate strength and work engagement. *Procedia - Soc. Behav. Sci.* **133**, 291–303 (2014). <https://doi.org/10.1016/j.sbspro.2014.04.195>