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Moderating Role of Technology Business Analytics Between Inspiring a Shared Vision, Enabling Others to Act, and Performance Continuity

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ABSTRACT

Public sector organizations are facing the issues related to performance continuity. At the same time nowadays technology adoption is increasing, and technology business analytics is commonly being used by the entities to sustain in the market. At the same time leadership roles are very important in performance continuity because many businesses fail to continue because of non-supportive leadership roles. Hence, this research aims to analyze technology business analytics as a moderator between two important roles of leadership which are inspiring the vision and enabling others to act, and performance continuity. For the said purpose 254 respondents data has been collected who were working in various public institutions in UAE through direct collect and web-based survey method. In order to ensure reliability and validity of the findings reliability tests were applied and after ensuring that the data is fit for further analysis structural equation modeling technique was applied. The findings revealed that inspiring the vision and enabling others to act have a significant impact over performance continuity and technology business analytics significant moderates the relationship. The study findings have string theoretical and practical significance. The study provide recommendations to future researchers based on the limitations of the current research.

Keywords:

Technology business analytics; Leadership, performance continuity; Inspiring the vision Enabling others to act

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1. Introduction

Today, organizations are highly concerned about performance continuity. In the current competitive era, organizations not only require greater productivity but effectiveness as well. Because of increasing crisis due to COVID-19 organizations are paying more attention to continuity of businesses as compared to performance [10,21] hence performance and sustainability cannot be ignored and managers are leaders are highly concerned about the same [14].

From organizational performance perspective managers and leaders of the organizations are highly concerned about continuity and sustainability of the businesses [8]. Therefore, continuity of

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1

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the business' performance is becoming the most serious issue that faces the process of both industrialized and developed nations [5]. In the developing countries the issue of continuity of businesses is even more significant as tackling the same is even challenging when we talk about the developing and progressing economies [38].

Institutions need to invest time and money to be prepared to deal with any emergency situation like the Pandemic [7] as it helps them in sustaining their performance. It's the leadership that supports; ability to adopt change, being committed to vision, setting path, establishing mission for organizations [5]. The management of the institutions need to follow sustainable practices to know exactly what they should do to protect their consumers and employees in critical times [19].

Several entities are not familiarized with the importance and significance of performance continuity for their operational as well as internal affairs [47]. Entities have limited resources and they have to utilize them with great care, especially when it comes to small entities [19]. Performance continuity means that the availability of contingency plans that the entities have to recover in a cost-effective way, from any adverse situation.

It's the leadership that has to develop contingency plans and has to focus on success and continuity of the entity in an innovative way [9,11,13,]. Leaders need to implement several functions beyond the regular activities to keep their organizations active and successful to make them sustainable [11]. Hence, this research focused over two main functions of leadership while considering the need for and importance of business analytics as a moderator for achieving performance continuity [9,10] while focusing over department of economic development unit in Sharjah-UAE.

The rest of the study is organized in a way that initially the literature has been reviewed to develop the framework and find the gaps in the literature and the support of related theories. Afterwards the methodology presented has been followed to test the developed framework. Methodology is then followed by the analysis of the collected data. Finally, the discussions are made followed by the conclusions and significance of the study. At the end recommendations and limitations are mentioned.

2. Literature Review

The term performance continuity refers to keep the organizations moving which is linked with sustainability. Whilst another commonly applied term to the same context is future proofing of the organizations. The management of performance continuity is an all-inclusive procedure of managing the things that helps organizations to cater significant threats [36]. It means those threats, if realized might cause severe consequences and may cause the issue of survival of the entity. Thus, it provides a model for developing resilience in the entities with the capacity for an efficient response which can help in safeguarding the interests of all the stakeholders which consequently leads to sustainability and performance continuity.

2.1 Inspired a Shared Vision

The most important process locations effective indication is inspired a shared vision with the followers. Shared vision is a mutual dream which is a common goal for the management and the employee and is supposed to be developed by the leader and shared with the subordinates while setting a common direction [4]. Hence, developing a visionary followers base is necessary for the leaders [6,48]. The most challenging task for a leader is to realize its team members that recent hurdles being faced by the entities as it gives direction in acknowledging why team love certain

characteristics [40]. It also helps the followers in developing a deeper understanding of the challenges being faced by the organizations [1]. This also helps in making the employees understand that why it is mandatory to adopt the required changes in the near future [14,57].

Leaders having advancement and progressive skills, are capable of impersonating emissaries from the future. They are capable of conceptualizing where the market situations are moving [49]. Followers prefer to listen their benefits, thus sharing the vision and developing a mindset that it is the common goal of subordinates, and the leaders is mandatory to achieve maximum performance from the employees which gives performance continuity [25].

Leaders who ask for their own feedback from their employees usually get a supporting response and employees also feel that they are in a position to share their experience which motivates the employees [56,58]. Leaders who share the vision gain significant enhancement in the profit of the organizations [46]. This act of the leader shows extreme level of care and attention by the leader towards employees [10,12]. This sense of respect, attention, and care develops a communal dream which helps to lead the subordinates in the right direction [34].

2.2 Enabling Others to Act

Those employees who are allowed to take decisions regarding locating the resources by identifying inter folks at the job for solving the issues significantly influence not only the employee but the organization as well [59]. The purpose behind such a strategy is to unveil the methods that employees can utilize for inspiring themselves which helps in development of self-motivated and dedicated team. For this to realize leaders are testing various methods and techniques that how their individual behaviors influence others [51].

Associating each and every individual in the organization in the team for achieving the organizational goals in innovative ways, acts as enable driver and enhance self-motivation of individual employees which leads to organizational performance continuity [39]. When the mistakes are publicized, such activities act as enemy of enabling others to act [52]. Organizations are the master skill set which allows the team members to cooperate, develop alliances, and collaborate to perform the required tasks collectively [3].

Therefore, forerunners interact with all the employees who urge to get involved in projectized tasks, and with all those members of the organizations that are outcome oriented. In the current world, collaborative work is not restricted among tiny groups and people from all over the world having good knowledge can collaborate and if enabled can even perform better [15]. It's the leadership that makes extraordinary job easy for every follower and as a central theme teamwork is dependent over the leader [37].

It's the leadership that develops an environment of trust [16]. Leaders who are enablers are well aware of the importance of shared efforts that have the capability to produce phenomenal results [54]. True leadership is the one that is based on count on and trust over the subordinate. If the subordinates lack trust, they will execute the work but with cautions rather than taking risk to achieve the best [32].

Development of the environment of an organization where the employees feel themselves as vital is basically the soul of enabling others to act [53]. This act is basically a process of turning right into leaders themselves [53]. When the employees feel the power and energy to exercise, which gives a sense of possession and power, mostly employees give their best [5]. Leaders who believe in enabling others to act are more concerned about discovering ways through which they can engage folks in functioning over the issues that impact their entities and their own selves [3,22].

2.3 Underpinning Theories

The five practices of exemplary leadership theory contain the key features of transformational leaders [42]. According to this theory out of the five practices inspiring a shared vision and enabling others to act are the most crucial [17].

Inspired a shared vision is all about framing the future and recruiting people in accordance with the vision [41]. Such leaders have the capability to show their subordinates that how important they are for the task by encouraging them about the chances they can be helpful for the organization.

Whereas, enabling others to act trait of the leaders develop a sense of partnership which boosts the morale of the employees [40]. This capability of the leaders loosens the strict control over the employees and give them freedom while providing them power to act and decide the best way to perform their job [45]. Such leaders believe in teaching and enabling the employees to get full out of their capacity, especially in locations that allow them to work in the best interest of the organization [33].

Along with that, technology business analytics is supported by system theory. System theory contradicts with reductionism and support holistic theory. System theory believes in connecting parts of the system and make then one complete functional unit. System theory supports and argue interdependence, interconnectedness, and openness rather than independence. The overall model is closer to social exchange theory. Thus, it's not just a single theory, rather it is better to understand the concept as a family of conceptual models [44]. Hence, social exchange theory shares a number of common features which treat social life as a sequence of interconnected transactions involving more than two parties, thus, leadership followers and business analytics can be grouped under social exchange theory [18,29].

Inspired a shared vision capability of the leaders helps in developing a proper vision for the future [41]. Leaders who have that capability can motivate their subordinates as per the requirements of the future [23]. Therefore, it would be right to believe that leadership functions have a significant impact over performance continuity. Furthermore, in the current research the researchers are also expecting that appropriate technology business analytics can have a significant impact over boosting the influence of the two functions of leaders.

Hence, in the current research Technology Business Analytics has been considered as those skills and technologies which are crucial for the continuous iterative exploration and exploitation of the two main leadership functions which are inspired a share vision and enabling others to act. Therefore, based on the reviewed literature and the underpinning theories, it would be right to claim that performance continuity can be gained through inspired vision of the leader and enabling others to act capability of the leader and technology business analytics can have a significant moderating role over the relationship between inspired a shared vision, enabling others to act and performance continuity [43]. Therefore, the final proposed theoretical framework is as follows.

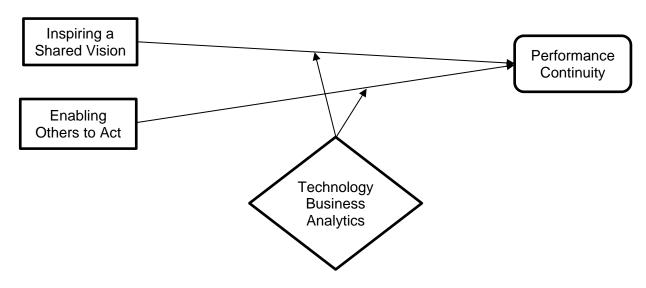


Fig. 1. Research framework

3. Methodology

The purpose of the study is to analyze the moderating role of technology business analytics over the relationship between inspired a shared vision, enabling others to act, and performance continuity. In order to fulfill the purpose of the study, empirical research was needed. This empirical research is cross sectional, and the data has been collected in a time period of three months from the employees of public institutions in UAE through direct collect and web-based survey method. The respondents were targeted from Sharjah State, because issue of performance continuity was very high in the region. Secondly, to be more precise economic development unit of Sharjah was chosen. For collecting the data and to measure the variables in the study the questionnaires were adopted from prior studies. The researchers send the instrument to 500 employees, however, after reminder calls and follow-up messages 254 responses that were complete and usable were collected and the sample is adequate as structural equation modeling has been applied [27]. The responses were recorded anonymously regardless of the position level of the respondents. The items for performance continuity were taken from a prior study [5]. Similarly, the items for technology business analytics were also adopted from prior literature [55]. The items for the two functions of leadership i.e. inspired a shared vision and enabling others to act were picked from the previous study [2]. Despite the fact that the instruments were adopted, but as they instrument was applied to a different environmental setup, therefore, all the diagnostic analysis necessary for the validity and generalizability of the results were conducted [50]. Afterwards Smart PLS was used to run structural equation modeling as it is considered as good for the theory building and model testing [35].

4. Analysis

The aim of the study was to identify the moderating role of technology business analytics over the relationship between enabling others to act, inspiring a shared vision, as well as performance continuity. For the purpose pre-established instruments has been utilized yet it was essential to check the reliability and validity of the instruments, as the instruments are being utilized in the context of UAE. For the said purpose initially item loadings have been examined and items having loading value greater than 0.7 has been maintained in the model.

Therefore, findings of item loading for all the items are shown in Table 1:

Table 1Item Loadings (Outer Loadings)

	Enabling others to act	Inspiring a shared vision	Performance continuity	Technology business analytics
	0.00	VISIOII	Continuity	analytics
EOA1	0.89			
EOA2	0.84			
EOA3	0.88			
EOA4	0.83			
EOA5	0.87			
ISV1		0.84		
ISV2		0.88		
ISV3		0.85		
ISV4		0.82		
ISV5		0.87		
PC1			0.83	
PC2			0.80	
PC3			0.78	
PC4			0.85	
PC5			0.76	
PC6			0.83	
PC7			0.80	
TBA1				0.92
TBA2				0.86
TBA3				0.87
TBA4				0.87
TBA5				0.82

From Table 1 it is clear that all the items have appropriate item loadings and are relatively safe to keep in the model. After confirming the item loadings next stage is to check Cronbach's alpha, composite reliability and Average Variance Extracted in order to confirm the content validity of the instrument utilized to gather the data. All values of variables in Cronbach's Alpha must be higher than threshold level 0.7 as referred by [30]. Likewise, in composite reliability the indicator reliability as well as the internal consistency reliability for applying the composite reliability. Firstly, internal consistency mainly measures the consistency of results between the items of similar test. Hair *et al.*, [26] indicated the anticipated measurement of items are used to examine the variable to generate results which are comparable. Similarly, composite reliability varies between 0 and 1; therefore, threshold value should be less than 0.60 [31], thus, those variable values which are 0.70 and greater than 0.70 they are highly appropriate [26].

Furthermore, Average Variance Extracted (AVE) is also used with a threshold level of 0.50 and greater than 0.50 [26,31]. Thus, the values of AVE having 0.50 recognize the significant validity. Therefore, the findings of Cronbach's alpha, composite reliability, and Average Variance Extracted (AVE) of all variables enabling others to act, inspiring a shared vision, performance continuity, and technology business analytics are mentioned in Table 2.

 Table 2

 Reliability and validity (construct reliability and validity)

, , ,	Cronbach's alpha	Composite reliability	Average Variance Extracted (AVE)
Enabling others to act	0.88	0.91	0.68
Inspiring a shared vision	0.81	0.87	0.58
Performance continuity	0.91	0.93	0.65
Technology business analytics	0.92	0.94	0.76

The determined values of reliability and validity for all the variables are greater than the threshold levels. After confirming the reliability and validity, discriminant validity has also been tested to be sure that the items applied to measure each variable are efficient of determining the same variable. Hair *et al.*, [26] revealed that the most standard approach in examining the discriminant validity is Fornell-Larcker criterion. Likewise, discriminant validity is demonstrated when the square root value of average variance extracted of every variable is higher than the strongest variable relationship with any other latent variables [31]. Therefore, outcomes of discriminant validity values of all variables enabling others to act, inspiring a shared vision, performance continuity, and technology business analytics are mentioned in Table 3.

Table 3
Discriminant validity

	Enabling others to	Inspiring a shared	Performance	Technology
	act	vision	continuity	business analytics
Enabling others to act	0.83			
Inspiring a shared vision	0.52	0.76		
Performance continuity	0.61	0.57	0.81	
Technology business analytics	0.54	0.78	0.59	0.87

Table 3 clearly shows that the discriminant validity is recognized. After having that the instrument is reliable in all aspects, direct relationships have been examined by using a bootstrapping sample of 5000. The findings of the direct relationship between independent variables and the dependent variable are stated in Table 4.

Table 4
Direct effects (path coefficients)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/ STDEV)	P values
Enabling others to act -> performance continuity	0.44	0.47	0.16	2.76	0.01
Inspiring a shared vision -> performance continuity	0.34	0.31	0.15	2.29	0.02

The findings of the direct relationship between enabling others to act and performance continuity showed a significant relationship (β = 0.44, t= 2.76, p= 0.01). Likewise, the impact of inspiring a shared vision over performance continuity is also significant (β =0.34, t=2.29, p=0.02). After assuring the direct relationships, the next step was to recognize the moderating impact of technology business analytics. The outcomes for the moderating variable are showed in Table 5.

Table 5Moderating effects (path coefficients)

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	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/ STDEV)	P values	
Moderating effect 1-> performance continuity	0.41	0.45	0.15	2.67	0.01	
Moderating effect 2-> performance continuity	0.16	0.14	0.10	1.65	0.03	

Table 5 results revealed that moderating effect 1 has a significant impact over performance continuity (β = 0.41; t=2.67; p = 0.01). Likewise moderating effect 2 has a significant impact over performance continuity (β = 0.16; t=1.65; p = 0.03).

5. Discussions

All the relationships have been measured at a level of 5% significance which is considered as good for social science research [36]. The results of the study are based on a sample size of 254 respondents and a boot strapping sample size of 5000 has been applied to get the significance of the relationships. All the respondents belong to economic development unit of Sharjah United Arab Emirates. The results of structural equation modeling revealed that Inspired a shared vision has a significant impact over performance continuity, because passionate leaders believe in their employees and share the vision with them seek their feedback and make them partner in the vision for which employees feel motivated and perform very well which helps in achieving performance continuity [28].

Similarly, enabling others to act also has a significant impact over performance continuity, because those leaders who empower their employees make them more responsible and engage them in the work which motivates them, and performance continuity is ensured.

After ensuring the direct relationships interaction term of technology business analytics was introduced, the results of moderating impact of technology business analytics revealed that technology business analytics significantly moderates the relationships between inspired a shared vision and performance continuity as well as enabling others to act and performance continuity [20,24].

6. Conclusions

Based on the reviewed literature and the findings of the data collected from the employees of economic development unit of Sharjah UAE, the findings identified more significant indications for enhancing the role of technology business analytics to supplement the influence of two key functions of leadership. Technology business analytics have a significant moderating influence over the relationship between inspired a shared vision, enabling others to act and performance continuity. The current research strengthens the fundamental theoretical assumptions of social exchange theory and support exemplary leadership theory by enriching it with technology business analytics.

Hence, the current research added to the theory by bridging the gap with the help of technology business analytics for organizational performance continuity. This shows that in the context of UAE there is a need to further pay attention to Kouzes and Posner's [42] because the current model developed with the help of reviewed literature and underpinning theories support the argument that

effective leadership share the vision and enable their employees to perform their responsibilities with freedom because it aids the entities in overcoming the weaknesses of performance continuity. The findings are not only theoretically significant but also methodologically and practically, because practically, the leaders can understand that which function is crucial to gain performance continuity, secondly, especially for the public entities importance of technology business analytics is highlighted. Furthermore, future researchers are suggested to conduct qualitative studies for overcoming the issues associated with the leadership functions by digging out in depth that how leadership functions can be improved.

References

- [1] Abel, Mike, Teri Talan, and Marie Masterson. "Whole leadership: A framework for early childhood programs." *Exchange* 39, no. 233 (2017): 22-25.
- [2] Abu-Tineh, Abdullah M., Samer A. Khasawneh, and Aieman A. Omary. "Kouzes and Posner's transformational leadership model in practice: The case of Jordanian schools." *Journal of Leadership Education* 7, no. 3 (2008): 265-283. https://doi.org/10.12806/V7/I3/RF10
- [3] Aggestam, Lisbeth, and Markus Johansson. "The leadership paradox in EU foreign policy." *JCMS: Journal of common market studies* 55, no. 6 (2017): 1203-1220. https://doi.org/10.1111/jcms.12558
- [4] Alemu, Daniel S. "Dysfunctional organization: The leadership factor." *Open Journal of Leadership* 5, no. 01 (2016): 1. https://doi.org/10.4236/ojl.2016.51001
- [5] Alharthi, M. N. A. N., and Gamal Saeid Khalifa. "Business continuity management and crisis leadership: an approach to re-engineer crisis performance within Abu Dhabi Governmental entities." *International Journal on Emerging Technologies* 10, no. 2 (2019): 32-40.
- [6] Anam, Choirul, Armanu Thoyib, and Achmad Helmy Djawahir. "Roles and functions of transformational leadership in improving the Paskibra high school organization performance." *Jurnal Aplikasi Manajemen* 16, no. 2 (2018): 255-263. https://doi.org/10.21776/ub.jam.2018.016.02.08
- [7] Asad, Muzaffar, and Muhammad Kashif. "Unveiling success factors for small and medium enterprises during COVID-19 pandemic." *Arab Journal of Basic and Applied Sciences* 28, no. 1 (2021): 187-194. https://doi.org/10.1080/25765299.2020.1830514
- [8] Asad, Muzaffar, Naveed Altaf, and Aqeel Israr. "Data analytics and SME performance: A bibliometric analysis."

 In 2020 International conference on data analytics for business and industry: Way towards a sustainable economy (ICDABI), pp. 1-5. IEEE, 2020. https://doi.org/10.1109/ICDABI51230.2020.9325661
- [9] Asad, Muzaffar, Muhammad Uzair Asif, Lily Julienti Abu Bakar, and Umaid A. Sheikh. "Transformational leadership, sustainable human resource practices, sustainable innovation and performance of SMEs." In 2021 International Conference on Decision Aid Sciences and Application (DASA), pp. 797-802. IEEE, 2021. https://doi.org/10.1109/DASA53625.2021.9682400
- [10] Asad, Muzaffar, Muhammad Uzair Asif, Ather Azim Khan, Zafrul Allam, and Mir Shahid Satar. "Synergetic effect of entrepreneurial orientation and big data analytics for competitive advantage and SMEs performance." In 2022 International conference on decision aid sciences and applications (DASA), pp. 1192-1196. IEEE, 2022. https://doi.org/10.1109/DASA54658.2022.9765158
- [11] Asad, Muzaffar, Syed Hussain Haider, and Minaa Fatima. "Corporate social responsibility, business ethics, and labor laws: A qualitative study on SMEs in Sialkot." *J. Legal Ethical & Regul. Isses* 21 (2018): 1.
- [12] Asad, Muzaffar, Muhammad Kashif, Umaid A. Sheikh, Muhammad Uzair Asif, Shaju George, and Ghias UI Hassan Khan. "Synergetic effect of safety culture and safety climate on safety performance in SMEs: does transformation leadership have a moderating role?." *International journal of occupational safety and ergonomics* 28, no. 3 (2022): 1858-1864. https://doi.org/10.1080/10803548.2021.1942657
- [13] Asad, Muzaffar, Muhammad Shabbir, Rabia Salman, S. Haider, and Israr Ahmad. "Do entrepreneurial orientation and size of enterprise influence the performance of micro and small enterprises? A study on mediating role of innovation." *Management Science Letters* 8, no. 10 (2018): 1015-1026. https://doi.org/10.5267/j.msl.2018.7.008
- [14] Asif, Muhammad Uzair, Muzaffar Asad, Nadeem Ayub Bhutta, and Sajjad Nawaz Khan. "Leadership behavior and sustainable leadership among higher education institutions of Pakistan." In 2021 Sustainable Leadership and Academic Excellence International Conference (SLAE), pp. 1-6. IEEE, 2021. https://doi.org/10.1109/SLAE54202.2021.9788081
- [15] Asif, Muhammad Uzair, Muzaffar Asad, Muhammad Kashif, and Muhammad Abrar ul Haq. "Knowledge exploitation and knowledge exploration for sustainable performance of SMEs." In 2021 Third International Sustainability and Resilience Conference: Climate Change, pp. 29-34. IEEE, 2021.

https://doi.org/10.1109/IEEECONF53624.2021.9668135

- [16] Berkovich, Izhak, and Ronit Bogler. "The relationship between school leadership standards and school administration imperatives: an international perspective." *School Leadership & Management* 40, no. 4 (2020): 321-334. https://doi.org/10.1080/13632434.2019.1682538
- [17] Cheng, Lei, Sheng Feng, Yan Hu, and Marion E. Broome. "Leadership practices of nurse managers for implementing evidence-based nursing in China." *Journal of nursing management* 26, no. 6 (2018): 671-678. https://doi.org/10.1111/jonm.12594
- [18] Cropanzano, Russell, and Marie S. Mitchell. "Social exchange theory: An interdisciplinary review." *Journal of management* 31, no. 6 (2005): 874-900. https://doi.org/10.1177/0149206305279602
- [19] Elliott, Dominic, Brahim Herbane, and Ethné Swartz. *Business continuity management*. Routledge, 2001. https://doi.org/10.4324/9780203866337
- [20] Espejo, Raul, Werner Schuhmann, Markus Schwaninger, and Ubaldo Bilello. "Organizational transformation and learning: A cybernetic approach to management." (1996).
- [21] Al Fadhel, Hessa, Abdulla Aljalahma, Mesfer Almuhanadi, Muzaffar Asad, and Umaid Sheikh. "Management of higher education institutions in the GCC countries during the emergence of COVID-19: A review of opportunities, challenges, and a way forward." *The International Journal of Learning in Higher Education* 29, no. 1 (2022): 83. https://doi.org/10.18848/2327-7955/CGP/v29i01/83-97
- [22] Fernandez, Jane, K. Ardzejewska, and A. Haddad. "Higher Education Private Provider Quality Network (HEPP-QN) Academic Leadership Statement." This presentation was originally presented as: Fernandez, J., Ardzejewska, K. & Haddad, A.(2019, March). HEPP-QN academic leadership statement. Statement presented at the HEPP-QN Online Forum, Avondale College of Higher Education, Cooranbong, Australia., 2019.
- [23] Girma, Samson. "The relationship between leadership style, job satisfaction and culture of the organization." *International Journal of Applied Research* 2, no. 4 (2016): 35-45.
- [24] Granstrand, Ove. "Towards a theory of the technology-based firm." *Research policy* 27, no. 5 (1998): 465-489. https://doi.org/10.1016/S0048-7333(98)00067-5
- [25] Grotens, H. S., Gerda van Dijk, and Mark van Vugt. "Leadership practices of council secretaries in turbulent times: a case study." *Journal of Leadership, Accountability and Ethics* 15, no. 1 (2018): 29-42. https://doi.org/10.33423/jlae.v15i1.628
- [26] Hair, Joseph F., Christian M. Ringle, and Marko Sarstedt. "Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance." *Long range planning* 46, no. 1-2 (2013): 1-12. https://doi.org/10.1016/j.lrp.2013.01.001
- [27] Sarstedt, Marko, Christian M. Ringle, and Joseph F. Hair. "Partial least squares structural equation modeling." In *Handbook of market research*, pp. 587-632. Cham: Springer International Publishing, 2021.
- [28] Hao, Po, Wei He, and Li-Rong Long. "Why and when empowering leadership has different effects on employee work performance: The pivotal roles of passion for work and role breadth self-efficacy." *Journal of Leadership & Organizational Studies* 25, no. 1 (2018): 85-100. https://doi.org/10.1177/1548051817707517
- [29] Hashim, Muhammad, Muhammad Azizullah Khan, and Saqib Adnan. "Servant leadership and enhancement of organizational performance." *Global Social Sciences Review* 4, no. 1 (2019): 117-122. https://doi.org/10.31703/gssr.2019(IV-I).15
- [30] Henseler, Jörg, Christian M. Ringle, and Marko Sarstedt. "A new criterion for assessing discriminant validity in variance-based structural equation modeling." *Journal of the academy of marketing science* 43 (2015): 115-135. https://doi.org/10.1007/s11747-014-0403-8
- [31] Henseler, Jörg, Christian M. Ringle, and Rudolf R. Sinkovics. "The use of partial least squares path modeling in international marketing." In *New challenges to international marketing*, pp. 277-319. Emerald Group Publishing Limited, 2009. https://doi.org/10.1007/s11747-014-0403-8
- [32] Horvat, Ana, and Jovan Filipovic. "Service quality and maturity of health care organizations through the lens of complexity leadership theory." *Journal of Evaluation in Clinical Practice* 24, no. 1 (2018): 301-307. https://doi.org/10.1111/jep.12789
- [33] Kouzes, James M., and Posner, Barry Z. *The leadership challenge: How to get extraordinary things done in organizations*. Jossey-Bass, 1987.
- [34] Janssens, Sarah, Robert Simon, Michael Beckmann, and Stuart Marshall. "Shared leadership in healthcare action teams: A systematic review." *Journal of Patient Safety* 17, no. 8 (2021): e1441-e1451. https://doi.org/10.1097/PTS.000000000000503
- [35] Hair Joseph, F., C. Black William, J. Babin Barry, and E. Anderson Rolph. "Multivariate data analysis: A global perspective." (2010).
- [36] Al Kahtani, Nasser S., A. K. Nawab, and Zafrul Allam. "Organizational role stress: An empirical perspective of university teachers of Kingdom of Saudi Arabia." *International Journal of Applied Business and Economic*

- Research 14, no. 9 (2016): 336-355.
- [37] Kalinovich, Angelina V., and Jennifer A. Marrone. "Shared Leadership: A Primer and Teaching Recommendations for Educators." *Journal of Leadership Education* 16, no. 1 (2017). https://doi.org/10.12806/V16/I1/I1
- [38] Keradjaan, H., B. Tewal, V. Lengkong, and G. Sendow. "The effect of business continuity management and technology acceptance model towards lecturers' performance moderated by servant leadership." *Management Science Letters* 11, no. 3 (2021): 939-948. https://doi.org/10.5267/j.msl.2020.10.003
- [39] Khan, Ather Azim, Muzaffar Asad, Ghias UI Hassan Khan, Muhammad Uzair Asif, and Umair Aftab. "Sequential mediation of innovativeness and competitive advantage between resources for business model innovation and SMEs performance." In 2021 International conference on decision aid sciences and application (DASA), pp. 724-728. IEEE, 2021. https://doi.org/10.1109/DASA53625.2021.9682269
- [40] Fullan, Michael. The Jossey-Bass reader on educational leadership. John Wiley & Sons, 2012.
- [41] Kouzes, James M., and Barry Z. Posner. "It's Not Just the Leader's Vision." *Facilities Manager* 24, no. 4 (2008): 22-23.
- [42] Kouzes, James M., and Barry Z. Posner. "The five practices of exemplary leadership." *The Jossey-Bass reader on educational leadership* (2007): 63-74.
- [43] Krishnamoorthi, Suryanarayanan, and Saji K. Mathew. "Business analytics and business value: A comparative case study." *Information & Management* 55, no. 5 (2018): 643-666. https://doi.org/10.1016/j.im.2018.01.005
- [44] Loganbill, Carol, Emily Hardy, and Ursula Delworth. "Supervision: A conceptual model." *The counseling psychologist* 10, no. 1 (1982): 3-42. https://doi.org/10.1177/0011000082101002
- [45] Al Mansoori, Amer Saleh Nasser Abdulla, Ali Khatibi, and SM Ferdous Azam. "Determinants of leadership styles on organizational culture towards organization performance in abu dhabi public sector: structural equation modelling (SEM)." *European Journal of Social Sciences Studies* (2018).
- [46] Mestry, Raj. "Principals' perspectives and experiences of their instructional leadership functions to enhance learner achievement in public schools." *Journal of Education (University of KwaZulu-Natal)* 69 (2017): 257-280.
- [47] Niemimaa, Marko, Jonna Järveläinen, Marikka Heikkilä, and Jukka Heikkilä. "Business continuity of business models: Evaluating the resilience of business models for contingencies." *International Journal of Information Management* 49 (2019): 208-216. https://doi.org/10.1016/j.ijinfomgt.2019.04.010
- [48] Para-González, Lorena, Daniel Jiménez-Jiménez, and Angel Rafael Martínez-Lorente. "Exploring the mediating effects between transformational leadership and organizational performance." *Employee Relations* 40, no. 2 (2018): 412-432. https://doi.org/10.1108/ER-10-2016-0190
- [49] Popescu, Gheorghe H., and Vlad Predescu. "The role of leadership in public health." *American Journal of Medical Research* 3, no. 1 (2016): 273. https://doi.org/10.22381/AJMR31201610
- [50] Quinlan, Christina, Barry J. Babin, William G. Zikmund, Jon C. Carr and Mitch Griffin. *Business Research Methods*. London: Cengage. 2019.
- [51] Williams Van Rooij, Shahron. "Extreme teaming: lessons in cross-sector leadership." *European Journal of Training and Development* 41, no. 9 (2017): 814-81. https://doi.org/10.1108/EJTD-10-2017-0089
- [52] Şahin, Mehmet. "Women leadership and its effect on teachers' emotional labor in Turkish high schools." *Quality & Quantity* 52, no. Suppl 2 (2018): 1445-1454. https://doi.org/10.1007/s11135-018-0725-6
- [53] Salacuse, Jeswald W., and Jeswald W. Salacuse. "Leadership Help—Advisors and Negotiating Leaders." *Real Leaders Negotiate! Gaining, Using, and Keeping the Power to Lead Through Negotiation* (2017): 185-200. https://doi.org/10.1057/978-1-137-59115-9 12
- [54] Sulphey, M. M., and Zafrul Allam. "Efficacy of Mentoring in Enhancing Academic Outcome of." *The Social Sciences* 12, no. 8 (2017): 1384-8.
- [55] Sun, Zhaohao, Kenneth Strang, and Sally Firmin. "Business analytics-based enterprise information systems." *Journal of Computer Information Systems* 57, no. 2 (2017): 169-178. https://doi.org/10.1080/08874417.2016.1183977
- [56] Thien, Lei Mee. "Distributive leadership functions, readiness for change, and teachers' affective commitment to change: A partial least squares analysis." *sage open* 9, no. 2 (2019): 2158244019846209. https://doi.org/10.1177/2158244019846209
- [57] Waldfogel, Julie M., Dena J. Battle, Michael Rosen, Louise Knight, Catherine B. Saiki, Suzanne A. Nesbit, Rhonda S. Cooper et al. "Team leadership and cancer end-of-life decision making." *Journal of oncology practice* 12, no. 11 (2016): 1135-1140. https://doi.org/10.1200/JOP.2016.013862
- [58] Wesche, Jenny S., and Andreas Sonderegger. "When computers take the lead: The automation of leadership." *Computers in human Behavior* 101 (2019): 197-209. https://doi.org/10.1016/j.chb.2019.07.027
- [59] Wisniewski, Mary Ann. "Leadership development for academic chairs: Programs for promoting competence in higher education." *The Journal of Continuing Higher Education* 67, no. 1 (2019): 48-51. https://doi.org/10.1080/07377363.2019.1642718