

Research Paper

Innovation is the Way Forward: The Impact of Organisational Culture on Innovation in the United Arab Emirates (UAE)

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ABSTRACT

This paper aims to investigate the impact of organization culture on innovation using the United Arab Emirates (UAE). A quantitative approach was used for the study collecting data from 557 individuals working across the seven states of UAE in different organisations. The data was analysed using SmartPLS where partial least squares – structural equation modeling were used to test the relationship between organisation culture and innovation. The results show that, the unique working environment in UAE where there is a vast mix of cultures from all over the world making it difficult to establish a steady working culture, organisation culture still has a positive impact on innovation. The finding suggests that organisations and the government should take advantage of this situation and drive innovation using the correct approach.

HIGHLIGHTS

- A mix of cultures creates an interesting dynamic within an organisation and country, which requires leadership that understands these cultures.
- The right culture and leadership, makes way for creativity and innovation and can have a positive impact on innovation overall.

Keywords: Innovation, Organisation culture, Growth, United Arab Emirates, Management

The current global situation during the pandemic of 2020 has really shown the world that change is essential and innovation is key to survival. Coronavirus, COVID 19 to date, has infected hundreds of millions of people across the globe and caused millions of deaths globally, which is growing daily. A pandemic has been defined as how we see it today; it is the spread and movement of diseases through a large geographic area. As we witness, COVID 19 started in Wuhan, China, and has spread across the globe and was transmitted from animals to humans and now from human to human. It is further defined and described as being new disease that can spread rapidly and quickly with people having low immunity; they are infectious and contagious (Morens *et al.* 2009). We are a generation that are witnessing a pandemic which will impact and be remembered by many generations to come.

According to the IMF the global economy is taking a steep downturn worse than the one witnessed by some in the 1930's (bbc.co.uk, 2020). COVID 19 shows us how a pandemic can change the economy of the world and the growth of businesses. We see social distancing, work from home, travel restrictions, physical work restrictions, companies closing, and increased unemployment. Past studies have shown and predicted that such pandemics will impact economies, and we can see that the most noticeable impact is the impact on the economy and markets as we see one of the biggest slips (Yoldascan *et al.* 2008). Business growth is vital

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as it has a direct effect on the economy and vice versa. As we see today COVID-19 is affecting all businesses, which in turn is having an adverse impact on the economy. Whereas growth is seen as the development and extension of business, and it has a direct impact on the economy and is usually seen by a set of measurable outcomes which show positive development of a business (Achtenhagen *et al.* 2010; Leitch *et al.* 2010). Business growth is further looked upon by many researchers as contributors to the economy through their performance and success (Miner *et al.* 1989; Gundry & Welsh, 2001). According to research, businesses grow based on available resources and their ability to immobilize those resources to meet competition (Barney, 1991; Wernerfelt, 1984). It is also essential that the resources and output meet market needs and stand out over the competitor's goods. So, therefore, growth is vital for a company to ensure its survival and to ensure support to the economy; there are many factors that can influence growth, from individuals to market needs and demands (Cyron & Zoellick, 2018).

For companies to innovate, grow, and have a direct impact on the economy. Ensuring employment is key, as money needs to circulate continuously within an economy and through people's hands (Harkness & Evans, 2011). Employment is defined by the majority of researchers as individuals being economically active through paid work, and economies increase in value through full utilization of their employable individuals (Brauer, 2009; Hawkness & Evans, 2011; Thelen, 2019; Radulescu *et al.* 2019 and Vobemer *et al.* 2017). Another key element and indicator of economic growth are GDP, which accounts for imports, exports, and domestic spending with spending power, which can affect different industry sectors at different times based on supply and demand (Brauer, 2009). Therefore to ensure innovation and growth, the key element is organizational culture, which will ensure people's attitude and the direction of the organization.

Innovation couldn't be more critical than ever today as it is the key element; we are seeing innovations being developed through remote working, remote learning and teaching, and many other new initiatives and innovations are being tested. Innovation has been defined by many researchers and theorists as a transformation that changes

a product or service to meet the ever-changing demands of consumers, or new ways of doing things or bringing new products and services to the market, which are essential for the company and economic growth (Igor *et al.* 2011, Johannsessen & Skaalsvik, 2015 and Van Vuuren & Alemayehu, 2018). Innovation is critical in times of crisis; it is considered as a catalyst to innovation; therefore organisations, governments, and economies need to innovate to ensure economic development and to support the businesses serving that economy (Igor *et al.* 2012 and Golovchenko *et al.* 2022).

With globalization at its peak, today we see a diverse workforce across organizations which comprise all nationalities, religions, ethnicities, and attitudes, which all combined create complex organisation cultures (Al Salami *et al.* 2014). Organisation culture is vital when it comes to measuring the overall output of an organisation, as it defines an organisation and sets the values for its people. On an organisation level, it sets the values and beliefs of the organisation, and on an individual level, the culture actually forms the philosophy, rules, behavior, and feelings towards the organisation (Martins & Terblance, 2003). Many researchers also see organisation culture as a set of values and conditions that form the norms and rules of people working with each other (Hoque *et al.* 2013). Therefore organisation culture through people can affect the innovative environment within an organisation.

Past studies have shown that organisation culture impacts the change and development of an organisation, as this affects the employee attitude, and they are the main drivers of change and innovation (Zhuang *et al.* 1999). If we look at organisation culture from an employee perspective, because innovation and change involve an element of risk, this can have an effect on employees, which in turn can impact organisation culture and innovation overall (Tucker, 2001). The main purpose of this paper is to evaluate and measure the impact of organisation culture on innovation.

Literature review

Some scholars have looked at innovation and organisational culture in different contexts, which provides the paper a foundation to work off using their findings and views.

Studies and research done by past scholars show that innovation provides novelty in different ways, either through the service we offer or the products we develop and even through a new idea delivering a service or product, which can be technology or service based through management processes (Mohd Zawawi *et al.* 2016 and Stenberg, 2016). Ronningen and Lien (2014), carried out research in the business environment and discovered that innovation enhances existing services and products, which in return enhances customer experiences; they also discovered that it also enhances the sector within as it generates competition and organisations start innovating. Looking further at innovation helps boost output and attracts investment to ensure growth as new services and products meet end-user requirements (Meissner *et al.* 2016).

Research is done by Miozzo *et al.* (2016), shows that it is vital for organisations to attract the best talent to ensure innovation, as talented individuals prefer to have the freedom to explore and innovate; they also noted that organisations with strong research and development appeal to talented innovators. When Assouad and Parboteeth (2018), looked at the dynamics of culture and innovation, they highlighted that further studies in the area need to be carried out as the concepts go beyond organisation-level impact and impact a country and its people, the two elements have an interdependency, and at times innovations can be rejected by society as a whole. This, in turn, impacts organisations and their people as they feel that they haven't been appreciated, and it reverses the effect of growth and hampers the organisations culture.

Organisation culture is usually the key driver of all development within an organisation, it usually sets the general philosophy and thinking of the organisation and how it carries its aims and objectives forward. However, these can be altered by employees, their beliefs, and their cultures, as this influences how they behave and the culture around them (Chan-Serafin *et al.* 2013). Buschgens *et al.* (2013), further discovered that internal and external factors influence the culture within an organisation, which influences safe spaces. Organisation culture is also the reflection of the founder or management and the demands of the industry. Pless *et al.* (2012) and Voegtlin *et al.* (2011) noted a clan culture within organisations, where individuals shared the same

thoughts and values and considered themselves as one tribe, and drove the organisation with their thoughts. A study carried out by Gioia *et al.* (2013), where 50 organisations were analyzed based on their culture formation and policy development, discovered that organisation culture is taught to individuals through the challenges faced internally or externally by an organisation, and this in return sets a culture. Murphy and Saal (2015), further emphasize the point of the founder's personality and drive to operate the organisation set the basis of the culture.

Organisation culture is vital to organisation activities; culture impacts the day to day running of an organisation, which has an effect on customers and overall market performance; an ethical culture should be developed to enhance individuals and their success (Hung *et al.* 2010). A study was conducted by Laschinger *et al.* (2014), where they used a survey to collect data from 1260 individuals to test whether a positive culture creates a positive organisation; they discovered that organisation culture plays a key role in how internal and external stakeholders view the organisation. Coming back to innovation, innovation is usually associated with change, changes that will impact operations, resources, attitudes, policies, and structures (Mohd Zawawi *et al.* 2016). Based on previous research, there seems to be a correlation between organisation culture and innovation as they impact each other.

Hypothesis Development

Organisation culture plays a key role in determining the growth and development of an organisation, it also sets the values, beliefs, and operative culture within an organisation creating a unique group. On the other hand, organisations in today's world need to be innovative and develop services and products further to stay ahead of competitors, which involves risk and significant changes in all aspects.

As the literature shows, innovation provides novelty, either through service or products developed, which can be technology or service (Mohd Zawawi *et al.* 2016; Stenberg, 2016). Innovation enhances existing services and products, which enhances customer experience and the sector and creates competition (Ronningen & Lien, 2014). Innovation boosts productivity and enhances investment for growth (Meissner *et al.* 2016). Acquiring talent is vital to

innovate (Miozzo *et al.* 2016). Innovation and culture impact organisations, countries, and people, which impacts organisation culture (Assouad & Parboteeth, 2018). Organisation culture sets the general philosophy and thinking of an organisation, which is influenced by employees, beliefs, and cultures (Chan-Serafin *et al.* 2013). Internal and external factors influence cultures within organisations as reflected by the founder, management, and demands. Organisation culture is taught through challenges by an organisation (Gioia *et al.* 2013). Organisation culture is vital to organisation activities it impacts day-to-day running, customer experience, and market performance (Hung *et al.* 2010). Innovation innovation is associated with change; changes impact operations, resources, attitudes, policies, and structures (Mohd Zawawi *et al.* 2016). From which the following hypothesis is derived:

H₁: Organisation culture impacts innovation within organisation

Diffusion of innovation theory

The diffusion of innovation theory focuses on the realization and spread of new innovations; diffusion is based on conditions that provide acceptance or rejection of new innovative ideas. For this paper, organisation culture will determine acceptance or rejection (Benabou *et al.* 2015; Diffusion of Innovation theory, 2018).

Organisation culture creates the norms of an organisation, which is influenced by people, their beliefs, and social backgrounds, through which they create an environment and clan within an organisation driving its culture. On the other hand, innovation disrupts norms within an organisation, demanding change to enhance growth and development, therefore, the following conceptual framework is developed assuming organisation culture will impact innovation.



Fig. 1: Conceptual framework

The proposed framework indicates that innovativeness within an organisation clearly supports the variables employed in this research. This paper assessed the role of organisation culture on innovation; the model recognizes the contribution of innovation and organisation culture to the overall performance of an organisation in today’s competitive world.

Research Methodology

Questionnaires were sent out to 557 individuals working across the seven states of the United Arab Emirates, which include: Abu Dhabi, Dubai, Sharjah, Fujairah, Ras Al Khaimah, Ajman, and Umm Al Quwain. The list of individuals was gathered by contacting companies out of local business directories and chambers of commerce in different states of the country. The directories and chamber of commerce are responsible for listing and storing company details, through whom working individuals can be contacted. Data was gathered over a period of four months until February 2021. The SmartPLS software, partial least square, and Structural equation modeling (PLS-SEM) were used to evaluate the framework and test the hypothesis.

Assessment of measurement model (Outer model)

There are two steps in PLS-SEM for analysis purposes, which are the measurement model and the structural model. The measurement model is used to test the relationship between variables and their item indicators; there are four steps: (i) individual reliability, which tests the reliability of each item or question, (ii) internal consistency reliability, where the reliability of the relationship is tested, (iii) convergent validity is tested to for the level of correlation of multiple indicators to ensure they agree with each other, and then (iv) discriminant validity, is tested to ensure every construct and item is different to each other (Henseler *et al.* 2009; Hair *et al.* 2012 and Tabachnick & Fidell, 2007). Individual reliability is established through the loadings of each item; the algorithm function in PLS is used to establish the loadings (Ringle *et al.* 2013). The item loading should be 0.40 or greater, as set in this study, because of the data size being over 350 (Ab Hamid *et al.* 2017), and all items with an outer loading below 0.40 will be removed from the

model, and all items above will be retained keeping in mind that an AVE of 0.50 and above is retained to ensure convergent validity. Table 1 shows the loadings for each item that has a minimum value of 0.40. Internal consistency reliability is assessed through an algorithm using the composite reliability function on SmartPLS.

Table 1: Loadings, Composite reliability and AVE

Constructs	Loadings	Composite Reliability	Average Variance Extracted (AVE)
Organisation Culture		0.929	0.505
O1	0.657		
O2	0.561		
O3	0.486		
O4	0.862		
O5	0.747		
O6	0.835		
O7	0.753		
O10	0.828		
O11	0.724		
O13	0.7		
O15	0.618		
O16	0.668		
O17	0.703		
Innovation		0.913	0.501
I3	0.442		
I6	0.85		
I7	0.795		
I8	0.819		
I9	0.467		
I12	0.852		
I13	0.843		
I14	0.756		
I15	0.677		
I16	0.493		
I18	0.597		

The results in table 1, show that the composite reliability for each variable is above 0.70; for the measurement model, composite reliability should be 0.70 or more (Hair *et al.* 2011). Convergent validity test is carried out to ensure that all indicators agree with each other across multiple items (Hair *et al.* 2014). The convergent validity was tested through an algorithm using the Average Variance Extracted

(AVE) function in SmartPLS; the minimum value of 0.50 was used (Hair *et al.* 2011). Table 1 shows the AVE value for each construct, and they are above the minimum value 0.50. The final criterion of the measurement model is the discriminant validity; this ensures that every construct is different from each other and they actually represent the construct (Hair *et al.* 2014). The heterotrait-monotrait (HTMT) ratio is used to measure the discriminate validity, and according to Hair *et al.* (2017), the value for HTMT should be below 0.90. Table 2 shows the HTMT values that show discriminant validity.

Table 2: Discriminant validity – HTMT Criteria

	INV	ORC
INV		
ORC	0.869	

Assessment of structural model

Figure 1 shows the structural model used in SmartPLS to assess the findings and establish the statistical data required for the relationship between organisation culture and innovation within UAE. The analysis is recorded in table 3, which shows the hypothesis developed and tested for this study, which was H1: Organisation culture impacts innovation within organisations. The results generated through path coefficient analysis in SmartPLS show the following in table 3, a T statistics value greater than 1.96, which means that there is a relationship between organisation culture (ORC) and innovation (INV), further the O value shows a positive impact and the P value is at 0, which means the hypothesis is supported (Hair *et al.*, 2014 & 2019).

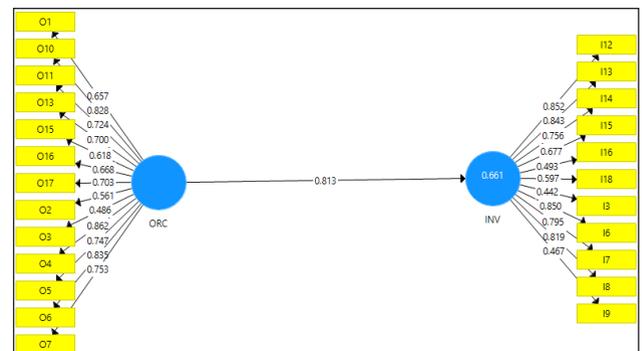


Fig. 2: PLS_SEM Structural model

To further enhance the analysis, table 4 shows the coefficient of determination (R square adjusted);

Table 3: Path coefficient

Hypothesis	Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decision
H1	ORC -> INV	0.813	0.815	0.016	52.434	0	Supported

this was used to test the inner model’s accuracy when predicting and the explained variance of the dependant variable. The values are read as per the following criteria 0.67, 0.33, and 0.19 (substantial, moderate, and weak) (Vinzi *et al.* 2010). So, therefore, according to table 4 the R square value is substantial.

Table 4: Coefficient of determination R square

Latent variable	R Square Adjusted
INV	0.661

Table 5 shows the effect size F2, which further enhances and supports the effect size from the P value in table 3, and it is vital to report F2 value (Sullivan & Feinn, 2012). The values are interpreted as follows 0.02 is small, 0.12 medium, and 0.35 + is large (Cohen, 1988). The effect size for this study is 1.953, which shows a very large effect.

Table 5: Effect size (F2)

Construct	Effect size (F2)
INV	
ORC	1.953

Finally, the Q2 value was tested to check the predictive relevance; according to Vinzi *et al.*, (2010) the Q2 value should be above zero to determine an excellent predictive relevance and to deem the structural model fit for its purpose (Vinzi *et al.*, 2010 and Hensler *et al.*, 2009). Table 6 shows a Q2 value above zero, which means the structural model in this study is relevant.

Table 6: Construct cross-validity redundancy

Construct	SSO	SSE	Q ² (=1-SSE/SSO)
INV	6127	4134.679	0.325
ORC	7241	7241	

DISCUSSION

UAE, in recent years, has seen a major development in its industrial development and is driving innovation to secure future growth and become

less reliant on oil income. In terms of the workforce and population, UAE employs a majority of its workforce from around the world, with a significant part of the working population coming from Asian countries; this vast amount of workforce brings with them their cultural beliefs, and social norms, including the working culture they are coming from. UAE, on the other hand, is a Muslim country, and the culture is Islamic and Arabic all norms are driven by this, giving UAE a unique environment to work in and be part of the different organisation cultures. The founders, managers, and employees form a unique environment and working cultures blend to form a unique organisational culture. In such environments, it is perceived that change will be challenging, which is derived through innovation. Still, the study has shown that in such situations organisation culture can have a positive impact on innovation and can drive change and innovation within UAE. Over the last few years, UAE has been pushing innovation in all industries, and as a result, they are instilling innovation into everyone’s everyday lives. It should be noted that most studies in social science are conducted in western countries, and there is limited studies in the context of UAE. This is a positive finding for the unique working environment in UAE, and UAE should take advantage of this and drive innovation further.

CONCLUSION

This paper looked at the impact of organizational culture on innovation within the United Arab Emirates. From the findings, we can see that UAE is in a unique position where more than 50% of its workforce comes from different countries around the world who bring with them their cultures and norms. However, the study shows that the organisation cultures in UAE are ready for innovation and can have a positive impact on innovation, which can make the UAE a key driver of innovation. Moving forward, more research needs

to be carried out on awareness of innovation and how government influence can drive innovation within organisations.

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