

# **BARRIERS AND ENABLERS OF INNOVATION IN (UNITED ARAB EMIRATES) SMALL AND MEDIUM ENTERPRISES (SMEs) SECTOR**

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## **ABSTRACT**

*UAE is ranked number one in the Arab World and 38th country globally in Global Innovation Index ranking in 2018. The country positioned itself positively in these global indices reflects the developments in knowledge and technology outputs, business, market and infrastructure development in UAE due to push by the government policies on making UAE as a global hub for innovation. The purpose of this study is to draw on issues related to innovation practices and their antecedents (external-driven and internal-driven determinants) and impact on business growth performance in small and medium firms in the United Arab Emirates.. This study investigates the enabling factors to innovation practices for SMEs to support higher business growth performance in the emerging in the United Arab Emirates. Between primary data and secondary data, the researcher has collected primary data from 80 people in UAE that are working in SMEs or have their own start-up or are planning to start their entrepreneurial venture. The preliminary results from the study shows that there is a strong relationship between the variables and the growth of the SME sector in the region of UAE is dependent on the different barriers and enablers of innovation. Major enabler is the UAE governments positive attitude towards innovation through its innovation strategy that recognizes innovation as an important element of social and economic development in UAE. Important enabler is the competitive technology resources for the communication and sharing of knowledge among educational, research institutions and innovation incubators. Most importantly the introduction of new funding options for the innovative business ideas for the individuals and companies. NIS also focus on developing innovators with entrepreneurial spirit by providing opportunities of skill development through the development of innovative curricula in schools and universities and launching innovative competitions. UAE government aims to help the innovative SMEs in developing, promoting and commercializing their innovations and improving their global market accessibility. The outcome of this study will enable the policy and decision makers at SMEs and the government agencies to minimize the barriers of innovation in UAE based SMEs.*

**Keywords:** SMEs, Innovation Practices, United Arab Emirates, Barriers, Enablers, National Innovation Strategy.

## **INTRODUCTION**

Innovation is referred to as an important practice and approach for every organisation or businesses of all kinds. It is due to the reason that the role of innovation in the development of valuable and original products is unavoidable that benefits businesses or users for longer terms. Innovative approach and practices allow businesses to achieve a competitive edge from their rivals. The reason for this can be justified by the statement provided by Edquist (2012), Zortea-

Johnston (2012) that innovation is the process that is specifically used to improve, enhance or develop such a product that is valuable and original to its kind.

It is evident that the awareness of innovation has prevailed within the business sector of different countries. Majority of the businesses of today's world have realised the importance of innovation (Bossle, 2016; Hussein et al., 2016). It can be observed that businesses that have focused on innovation and have followed innovative approach have not only achieved a competitive edge for longer duration meanwhile, but these businesses have also added sustainability to their business for longer terms. A majority of the countries and businesses located in those countries have realised the significance of innovation and why it has become essential for the businesses to follow the innovative approach in relation to this increasing competitive contemporary business worlds. In realisation to this, several prior studies have been conducted to investigate the increasing importance of innovation. The study conducted by Shiller (2012) is significant in investigating innovation and how innovation has become necessarily important for today's business sector.

The aim of the study is to find and analyse the barriers and enablers of innovation and its impact on the growth of UAE SME sector.

## LITRATURE REVIEW

### UAE SME Sector

It has been the major concern for the business sector of UAE that large organisations have dominated the business domain whereas SMEs have also been positively contributing to innovation for achieving sustainable growth in the market (Miniaoui & Schilirò, 2017; Acs, 2017). With this positive and original contribution, SMEs have also become the key actors in various markets by pursuing specific innovating practices and strategies and by determining the higher margin of new product offerings. According to Schilirò (2015), in the UAE, the SME sector has been accounted for 92 per cent of the total number of firms as well as contributed up to 50% of the total GDP that is generated in the economy. Moreover, it has also been identified that approximately 200,000 SMEs that are based in UAE have been providing jobs up to 85% of the private sector. However, the main aspect which should be considered as essential for innovation behaviour is the development of human capital because the production and economic environment are changing at a rapid pace.

In the UAE, the total of nine out of ten employment opportunities come from SMEs; however, the major potential of these SMEs to incorporate innovation is relatively small as compared to large enterprise and government sector (Miniaoui & Schilirò, 2017). Entrepreneurs who have been involved in innovation also need to understand their key roles as enablers of new and innovative behaviours and ideas. However, these roles along with enablers have not been largely discussed in the context of UAE for this an effort needed to be made to find how barriers and enablers of innovation have been impacting the growth of UAE SME sector. D'Souza & Taghian (2018) stated that innovation is not regarded as the question of dimensions of the company rather it is a discriminating factor between openness and lack of openness in SMEs to incorporate innovation. Hence, the SME has been successful in UAE but their ability to innovate and its propensity is still low.

According to Al-Ansari, Pervan & Xu (2013), the business practices of SMEs in UAE have intended to emphasise on adjustment to structure, continuous improvement and adopting

new technology. However, this strategy has not enabled the firms to increase profit and decrease cost as well as move cautiously towards the new and innovative market domains. It indicates that the strategy has been dynamic and turbulent but Zimmermann & Thomä (2016) stated that SMEs have still been regarded as the guarantors of employment and growth and a key source of competitiveness in the economy; but this has also declined over the past due to lack of enough sources to innovate and be able to adapt to new market conditions. Hence, it is required for the SME sector to employ policies that can lead to the adoption of innovative practices for ensuring higher growth of SMEs.

### **Barriers of Innovation**

Innovation is regarded as important for the growth and development of companies. However, in this regard, SMEs face a large number of challenges and barriers in incorporating innovation in their operations and business-related procedures (D'Souza & Taghian, 2018; Ahmad et al., 2018; Jayakar & more, 2018; Moore, 2018; Reporter, 2018). One of the major issues faced by the SMEs in incorporating innovation is the cost emerged from innovation-related initiatives. With respect to this, the SME sector of UAE has been facing issues of changing global trends that bring the rising cost for incorporating innovation within the operations. The survey conducted by Burns (2016) found that in UAE there is a dominance of large enterprises in major sectors and it has become a major barrier for the SME sector to incorporate innovation. Due to this, SMEs are required to prioritise change and innovation in their business models and adapt to changing the environment to upgrade their development and growth.

The hydrocarbon-rich economy, UAE has also been in line with Vision 2021 due to which the frequent transformations have been brought in the country in terms of its business sectors (Burns, 2016). However, in terms of small businesses, the SMEs have been numerous issues in bringing innovation in their processes and business operations. Zaidan (2017) stated that a knowledge-based economy should be characterised by the rapid innovation however, this rapid innovation often brings cost barriers for the businesses having limited capital and human resources. Schilirò (2015) stated that innovation can be generated within the company of any size; however, younger and smaller firms suffer the most from the challenges of innovation for instance inability of scaling up successful and significant innovation to a larger international market. Another major issue that the SMEs in UAE face in the midst of implementing innovation is the insufficiency in financial and investment support, lack of skill and talent and difficulty in generating simulating and radical ideas in the enterprise (El-Sokari et al., 2013; Urbancova, 2013; Volchek et al., 2013). The SMEs in the UAE also face difficulty in defining an efficient business model for new innovative ideas and in making them profitable for the business.

### **Enablers of Innovation**

The SMEs sector of UAE has been making a positive and original contribution to the economy of the UAE, due to the adopting innovations within their business. Having an emphasis on technology and innovations within their business, the SMEs of UAE have become the main actors within the global market, demanding the significantly high share of new products (Forsman & Annala, 2011; Schilirò, 2011; Schiliro, 2018). The management of the SMEs located in the UAE considers that the efficacy of innovation is multiplied when the innovation is carried out the commercial purpose (Elbeltagi et al., 2013; Subhan et al., 2013).

Within the UAE SME sector, the innovative strategies are taken in terms of economic; rather than technology. The strategic decisions made by the UAE SMEs are one of the key enablers of innovations, which have been having positive impacts on the overall business performance of the SMEs (Al-Ansari et al., 2013; Schwab, 2013). Despite only confining the operations of innovation and the incorporation of technology within their business to the research and development department, the management of SMEs has been focusing on including the tacit knowledge, adaptability, as well as the entrepreneurial abilities, for incorporation of technology within their business (Soriano & Huarng, 2013). The innovations within any industry are most often pursued in the uncertain environment; therefore, the organisational capability of upgrading their services and including innovation within their business is another enabler to innovation within the SME sector.

Elbeltagi et al. (2013) stated that innovation requires appropriate leadership, the organisational structure, allocation of the available resources, and organisational culture positively accepting the changes. Brem (2011) also mentioned that the capability of the enterprises to formulate and amend their business strategies, the adopted technology and innovation is another enabler to innovation. Analysing from the context of the UAE SME sectors, the management of these organisations are capable of facilitating the incorporation of innovations within their business processes, by allocating a significant proportion of their revenues on technologically upgrading and advancing their business operations (Al-Ansari et al., 2013). For this reason, the efficient management of SMEs is a significant enabler of innovation.

## **METHODOLOGY**

The planning process that is undertaken for the purpose of achieving the aim and objectives of the research is considered as the research methodology (Kumar, 2019). In order to justify the study, the researcher needs to select a suitable research philosophy. This research adopts a positivist paradigm which is suitable in terms of collecting and analysing the data that is credible and is based on existing theories. This study uses statistical approaches for the purpose of analysing the data of the research that pertains to finding out the enablers and barriers of SMEs in the region of UAE. Hence this research paper has adopted an empirical quantitative approach. Brannen (2017) defines research approach as qualitative, quantitative, and mixed. Considering the fact that quantitative and numeric data has been used for this research, the research approach employed is a quantitative approach. The researcher has collected quantitative data through the application of survey instrument. Between primary data and secondary data, the researcher has collected primary data from 80 people in UAE that are working in SMEs or have their own start-up or are planning to start their entrepreneurial venture. The data analysis was conducted through the help of SPSS where descriptive analysis, correlation analysis, and regression are executed.

## **RESULTS**

### **Descriptive Statistics**

A total of 80 participants took part in this research study. As observed from in the table below, 47.5% (N=36) of the respondents were from the age group of 31 to 40. Majority of the

respondents of this study were male, to be specific 65% of the respondents were male (N=52) (Table 1). Among all the respondents, 43.75% (N=35) of the respondents had a bachelor's degree. Exactly half of the respondents (N=40) had a work experience of 1 to 5 years.

<b>Factor</b>		<b>N</b>	<b>%</b>
<b>Age</b>	18 - 20	18	22.50%
	21 - 30	21	26.25%
	31 - 40	36	45.00%
	More than 40	5	6.25%
<b>Gender</b>	Male	52	65.00%
	Female	28	35.00%
<b>Education</b>	Higher secondary	20	25.00%
	Bachelor	35	43.75%
	Master	18	22.50%
	Post Graduate	7	8.75%
<b>Work Experience</b>	0 - 1 year	20	25.00%
	1 - 5 years	40	50.00%
	More than 5 years	20	25.00%

### Correlation Analysis

To study the significance of the relationship between the enablers and barriers of SME innovation with the Growth of the UAE's SME sector, correlation analysis has been used. Following is the hypothesis which has been tested:

*H1 = There is a significant relationship between enablers and barriers of SME innovation with the growth of UAE's SME sector.*

The Table 2 shows that there is statistical significance in the relationship between the variables study ( $p=0.000$ ). The strength that has been obtained from the Pearson Correlation coefficient shows that there is a positive and strong relationship (0.994) (Table 2). Hence the hypothesis that has been formed for this research study has been accepted.

	Enablers and Barriers of Innovation	Growth of UAE SME sector
Enablers and Barriers of Innovation	1	0.994**
Growth of UAE SME sector	0.994**	1
**correlation is significant at 0.01 level (2-tailed)		

## Regression Analysis

The regression analysis was used for the purpose of testing the hypothesis related to the impact of the variables. Following is the hypothesis that has been tested from the linear regression:

H2= There is a significant impact of enablers and barriers of innovation on the growth of the SME sector in UAE.

The independent variable of the model are the enablers and barriers of innovations and the dependent variable is the growth of the SME sector of UAE. The strong relationship between the two variables is found from looking at the value of R (0.994). It is also significant from the table that enablers and barriers of innovation can explain a large portion of variation that occurs in the growth of SME sector of UAE ( $R^2 = 0.988$ ) (Table 3). The sig value in the ANOVA table shows that there is a significance of the impact of the independent variable on the dependent variable ( $p=0.000$ ) (Table 4). The value of coefficients is shown which shows that 0.949 units change can occur in the growth of the SME sector of UAE if the enablers and barriers of SME innovation are changed by a single unit ( $p=0.000$ ) (Table 5).

<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
0.994	0.988353472	0.988204	0.098893

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	64.73577968	1	64.73577968	6619.275	0.000
Residual	0.762831432	78	0.00977989		
Total	65.49861111	79			

	<b>Unstandardized coefficients</b>	<b>df</b>	<b>Standardized coefficients</b>	<b>T</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(constant)	-0.077	0.017		-4.563	0.000
Enablers and Barriers of Innovation	0.949	0.012	0.994	81.359	0.000

Thus, the results of the regression analysis have signified that the hypothesis statement regarding the impact has statistical significance. Henceforth, this research study has stated that enablers and barriers of innovation tend to impact the growth of the SME sector in the region of UAE.

## DISCUSSION

The findings of the research have stated that there is a positive relationship between the barriers and enablers of innovation with the growth of the SME sector in the region of UAE. The respondents have included some of the important insights regarding enablers and barriers of innovation in the SME sector. It was identified by this research study that having efficient leaders and managers in the organisation is significantly important in terms of integrating the processes with innovation and technological advancement. Elbeltagi et al. (2013) found similar findings, indicating that leaders and managers are important determinants for the adoption of innovation in SMEs. In the same regard, it was found that the strategic framework of an SME is important in terms of absorbing the new technology and innovative ideas in the business. Berm (2011) found that a robust strategic framework is required by a company for the purpose of integrating innovation in an efficient manner.

When the respondents were asked about high costs attached to innovation being a barrier, the majority of the respondent agreed. These primary findings can coincide with the findings from the previous researches which have shown that in order to innovate the SMEs have to incur a significant amount of cost which can dent the financial position of the company (D'Souza and Taghian, 2018). Appropriate resource allocation has found to be an important factor in terms of ensuring that innovative ideas are implemented in the organisation. The primary findings of this research paper have agreed with the statement. It has been pointed out by the participants that the lack of investment and financial aid available to the SME sector tends to influence their ability to innovate in a negative manner hence it is considered as the barrier. El Sokari et al. (2013) have also agreed with the shortage of financial support for the SMEs.

There are previous researches regarding the enablers and barriers of innovation in the SME. Zortea (2013) has explained in the research that it is significantly important for the SME owners and managers to understand the importance of innovation. UAE is considered to be a nation where innovation is provided significance not only by the large corporations but by also the smaller organisation because it contributes towards the growth and productivity of the overall economy. In this regard, the results of research of Parida et al. (2012), Al-Khoury (2012) Ardic et al. (2012) have shown that innovation in the business sector is important for survival either it is large organisations or SMEs.

The chief reason for this research paper was to find out the impact between the barriers and enablers of innovation on the growth of SMEs in the UAE. From the information that was obtained from the participants of the research, it has been found that there are a strong relationship and impact between the variables. From the discussion of the primary results as well as the findings of the secondary data, it has been found that it is important for the SMEs to integrate innovation by considering the barriers and enablers of innovation in order to contribute successfully to the growth of the business sector and the overall economy.

## CONCLUSION

The detailed report presented above shows that the barriers and enablers of innovation play a major role in terms of contributing to the growth of an SME and ultimately towards the growth of the entire SME sector. The major focus of this report was on the SMEs operating in the region of UAE and their enablers and barriers of innovation. From this research paper, there are several enablers identified such as a robust strategic framework, efficient leadership, and management. Some of the barriers of innovation that have been identified in the research paper

are lack of technological support, lack of investment and financial resources, and incompetent business models. From the analysis of the statistical tests which have been carried out for the purpose of this research, it has been found that there is a strong relationship between the variables and the growth of the SME sector in the region of UAE is dependent on the different barriers and enablers of innovation. Thus, the SMEs should capitalise on the enablers and mitigate the barriers in order to innovate.

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