

# Study of the significance of using technology in enhancing the productivity in SMEs in Ad' Dhahirah Governorate

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## ABSTRACT:

Small and medium enterprises (SMEs) can play a significant role in the economic growth of any country around the world if they are supported to give them the ability to increase their contribution to the GDP (Gamidullaeva et al., 2020). In order to promote the sector of entrepreneurship and small and medium enterprises in the Sultanate, the government established a particular authority under the name of the Authority of Small and Medium Enterprises Development known as (Riyada) to supervise the regulation of this sector (Alqassabi, 2020). The rapid technological advances in our contemporary world have helped develop performance and productivity in companies globally. For this reason, companies of various classifications, including small and medium enterprises, are striving to use the latest technology in order to improve their production capacity and ensure their ability to continue competing in the market (Sunday & Vera, 2018). With technology, small and medium enterprises can get many benefits as the application of technology in these institutions will enhance the efficiency of their performance and raise their level of productivity. In addition, technology can ensure that these enterprises can compete with other competitors in the market in the long term (Ballestar et al., 2020).

Overall, this research aims to find out how technology can be a catalyst in increasing the productivity of small and medium enterprises in Ad'Dhahirah Governorate were taken as a model (Prasanna et al., 2019).

**The Keywords:** *Small and Medium Enterprises (SMEs), productivity, Technology, Ad'Dhahirah Governorate.*

## **Introduction:**

Small and medium enterprises are overgrowing in Oman for many reasons, most significantly in the stimulus and government support of this sector, and the shortage of jobs in the public and private sectors, particularly for graduates of higher education institutions. The SMEs Development Authority (Riyada) manages and supervising this sector in the various Sultanate Governorates, offering support and guidance to SMEs. In the Ad'Dhahirah Governorate, located in the northwest of the Sultanate of Oman, which has a population of about 213043 people, the number of SMEs, according to the statistics available to the Authority of Small and Medium Enterprises Development, is 2816 establishments, 1038 of which have a Riyada card (the card that gives special privileges to owners of SMEs).

This study aims to analyze the significance of applying technology in enhancing the productivity of SMEs in Ad'Dhahirah Governorate. The target group in this study is the small and medium-sized companies that have the Riyada card (1038 companies), as mentioned previously. Through this study, I will clarify the current situation of SMEs in the governorate concerning the application of technology in them. Moreover, the study will identify the significant barriers to adopting technology in these institutions. In this study, I will use a mixed research methodology that combines qualitative with quantitative. A questionnaire will be distributed to the target group of SME owners, their customers, and suppliers to obtain the data required for the study. A questionnaire will be distributed to the target group of the owners of small and medium enterprises, their customers, and suppliers, as well as conducting some interviews with a number of them to obtain the data required for the study. Some recommendations will be put forward at the end of this study to assist SMEs in improved productivity by using the technology.

## **Literature Review:**

This part of the paper will review many literature reviews that dealt with different issues related to SMEs and the application of technology in them. It will show the role that SMEs play in developing the economy in any country in global. The importance of adopting technology in SMEs will also be clarified, especially with technological

developments in our contemporary world. In addition, the current situation of small enterprises in the Sultanate of Oman in general and the Governorate of Ad'Dhahirah, in particular, will be explained.

### **The significance of SMEs:**

In today's economic world, SMEs play an essential role in any country's economic growth and stability. SMEs in various countries of the world contribute a large percentage of the gross domestic product (GDP). They are considered an essential resource for creating new job opportunities, ample scope for entrepreneurship, innovations, and new business ideas (Saqib et al., 2018).

According to official statistics of the World Bank, small and medium enterprises contribute about 40% of the gross national income to a large number of developing countries. They also contribute to the employment of approximately 50% of the workforce in the world (*World Bank SME Finance*, 2021). Therefore, major economic countries and developing countries seek to develop policies that support SME growth.

### **The role of information technology in developing SMEs:**

In today's financial and business world, information technology plays a crucial role. It helps develop businesses and increase productivity in all types of companies, including small and medium-sized companies. It is generally recognized that IT can offer enormous strategic and organizational benefits to any type of company (Pešalj et al., 2018). According to (Elshaiekh et al., 2018), Information technology helps SMEs improve their transactions and services and give them a competitive advantage over other competitors. Therefore, to grow their business and compete in the market, employees in small and medium businesses must be aware of the skills required to use information technology. The manager or owner of the small and medium-sized enterprise must also have technical skills, which helps the company adopt information technology. The rapid development of technology and its ease of use can be a catalyst for small and medium enterprises to broadly adopt technology in their operational activities (Nugroho et al., 2017). The technology adoption in SMEs will positively reflect on its work environment, support creativity and innovation among the employees, and enhance business growth opportunities. In addition, the technology will help them reduce operational costs and provide them with the necessary information to assist them in evaluating their performance and developing their future business strategies (Orser & Riding, 2018).

### **SMEs in the Sultanate of Oman:**

The economic growth and development of any country are significantly affected by the growth of small and medium enterprises. In the Sultanate of Oman, It expects that small and medium enterprise will contribute to the growth of the national economy in the coming years due to the economic diversification that the country adopts (Al-Abri et al., 2018). Small and medium enterprises in the Sultanate were classified based on a ministerial decision from the Authority of Small and Medium Enterprises Development (Riyada) in 2020. Where micro-businesses are those that have 1 to 10 workers and their revenues less than 15,000 Omani riyals, and small businesses are employed 11 to 50 workers and their revenues 150,000 to 12500,000 Omani Riyals, while medium companies have 51 to 150 workers and their revenues 1,250,000 to less than 5,000,000 Omani Riyals (Oman News Agency, 2020). The data released by the National Center of Statistics and Information (NCSI) indicated that there are 49 337 establishments in a total of small and medium-sized enterprises in the Sultanate. Up to 13,000 of these establishments are managed by Riyada cardholders (owners who manage their organizations full time). The government hopes that these enterprises will directly contribute to increasing the GDP of the Sultanate and creating many job opportunities for Omani job seekers (NCSI, 2021).

### **SMEs in the Ad'Dhahirah Governorate:**

In Ad'Dhahirah Governorate, there are 2816 small and medium enterprises, of which 1038 have a Riyada card (the target group for this study). The economic activities of these institutions vary between the various commercial, industrial, and agricultural activities. The majority of SMEs in the Ad'Dhahirah Governorate are micro-companies, and their activities are concentrated in the commercial field.

### **Literature review gap:**

Many previous studies dealt with different topics about SMEs in the Sultanate. However, there were no studies on the status of SMEs in the Al-Dhahirah Governorate. Therefore, this study will evaluate the situation of SMEs in this governorate. It will focus on the aspect related to the application of technology in these institutions.

## Problem definition:

In recent years, small and medium enterprises in Ad'Dhahirah Governorate have grown fastly. That is due to the government's encouragement and support for these enterprises and the governorate's economic growth. Despite this, small and medium-sized businesses in this governorate continue to face numerous challenges, including those related to the use of technology. Therefore, this study will try to find answers for the following research questions: What is the current situation of technology adoption in SMEs in the Ad'Dhahirah governorate, What are the obstacles that hinder these SMEs from adopting technology, What are the technologies they use the most, What is the role of the Authority of Small and Medium Enterprises Development in supporting SMEs in Ad'Dhahirah to adopt technology, and What are the recommendations reached by the study to support small and medium enterprises in Ad'Dhahirah to enhance their productivity.

Although there are many previous studies on the challenges facing SMEs in the Sultanate, more studies are still needed. This study will analyze the challenges facing the application of technology in SMEs in the Ad'Dhahirah Governorate to develop recommendations that may help these institutions apply technology.

## Methodology:

The researcher used mixed research methodologies in this study, the quantitative and qualitative methods, to get accurate data about the study topic. The quantitative method was used by preparing an online questionnaire for SMEs and their clients. This method aimed to support the study objectives and analyze the research problem. The online questionnaire consists of two parts. The first part includes the closed-ended questions related to the research topic. The other part contains the open-ended questions to give the respondent the chance to express their perspective about the research topic. The qualitative research method was used by conducting interviews (by phone) with some owners of SMEs in Ad'Dhahirah Governorate. This method aimed to obtain additional information on the application of technology in SMEs in Ad'Dhahirah Governorate, which the researcher did not obtain through the questionnaire.

## Results:

In this part, there will be an analysis of the primary data obtained through the questionnaire and the interviews. The questionnaire was analyzed through one of the statistical software, while the interview results were analyzed descriptively.

### Analyzing of questionnaire:

Fifty-seven respondents answered the questionnaire, 82.5% male and 17.5% female. The age group most participating in the survey is those between 31 and 35 years old, with 43.9% of the total number of participants. The majority of respondents in the survey are holders of a bachelor's degree, with a percentage of 40.4%.

The analysis of closed-ended questions where the answers have five alternatives (1- Strongly disagree / 2- Disagree / 3- Neither agree nor disagree / 4- Agree / 5- Strongly agree) are shown as the following:

- Using technology helps SMEs to improve their performance and increase their productivity.

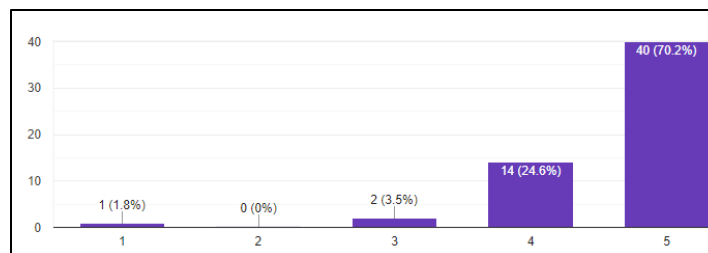


Figure (1): Impact of using technology in enhancing productivity in SMEs.

- A good communication infrastructure with adequate internet speed helps small and medium enterprises adopt the technology.

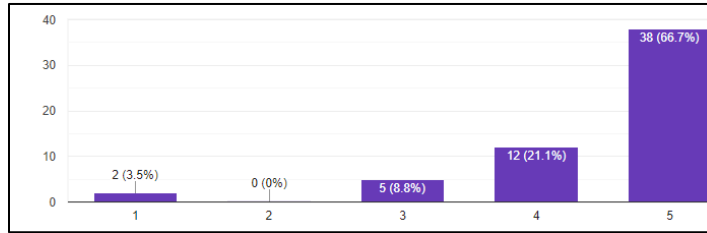


Figure (2): Role of communication infrastructure in supporting adopting technology in SMEs.

- The use of technology helps SMEs to market their products and facilitate communication with customers.

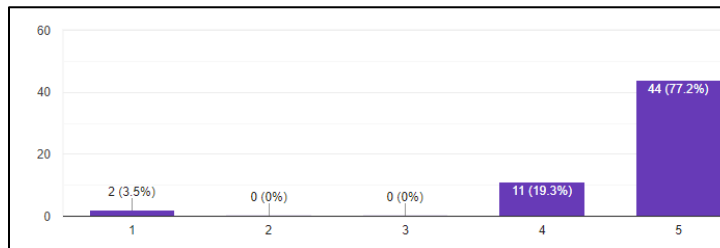


Figure (3): Technology facilitates marketing SMEs products.

- The use of technology helps the owners of SMEs ease communication with employees and track their performance.

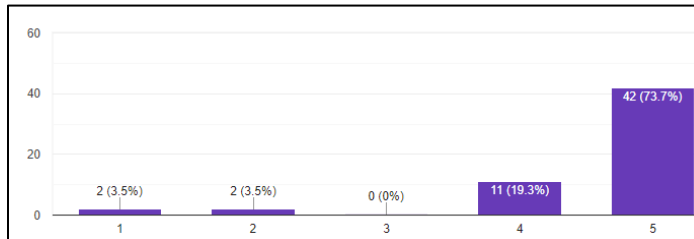


Figure (4): Technology facilitates communication within SMEs.

- Availability of finance is the most critical factor that helps small and medium enterprises to adopt the technology.

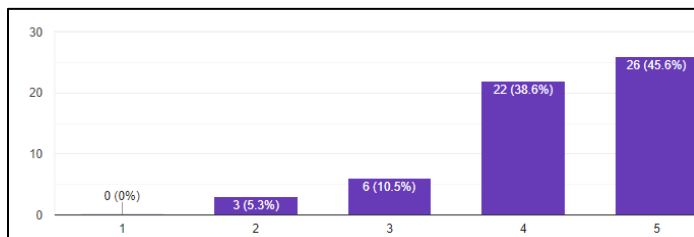


Figure (5): Availability of finance is a critical factor that affects adopting technology in SMEs.

- Financial support from the SMES Development Authority (Riyada) will encourage SMEs to adopt the technology.

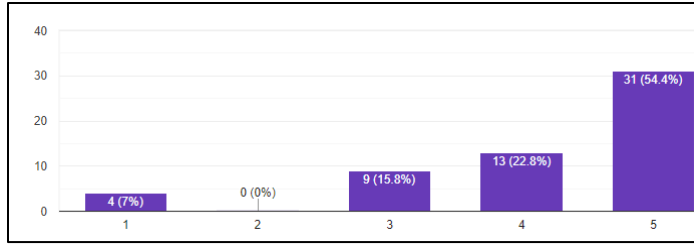


Figure (6): Financial support from Riyada encourages SMEs to adopt the technology.

- Training programs in various technology fields from the Authority of Small and Medium Enterprises Development (Riyada) will help small and medium-sized companies adopt the technology.

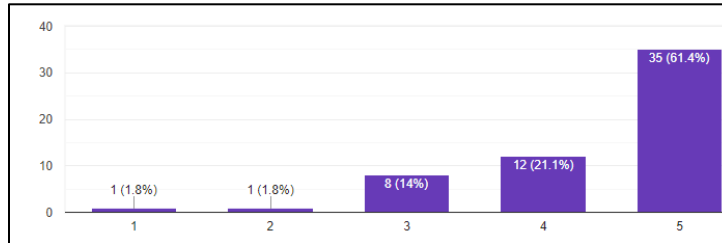


Figure (7): Training programs provided by Riyada encourage SMEs to adopt the technology.

- Providing special offers for Internet packages and other related services from telecommunications companies in the Sultanate for SMEs will help to adopt technology in these enterprises.

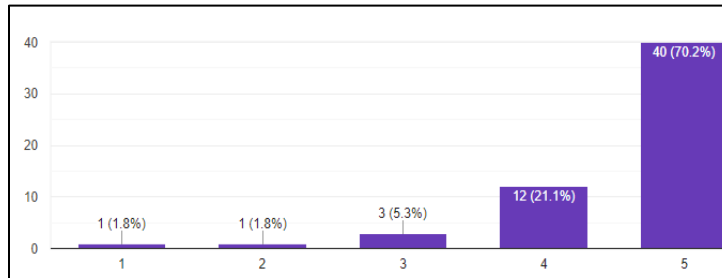


Figure (8): Special offers for internet services provided by telecom companies encourage SMEs to adopt the technology.

- The lack of knowledge of the owners of SMEs with the skills needed to use technology is one of the obstacles that prevent these enterprises from adopting technology.

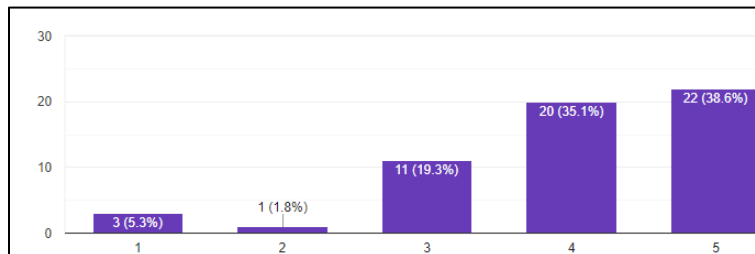


Figure (9): Lack of technology knowledge of the owners of SMEs does not help adopt the technology.

- The use of technology helps small and medium-sized companies to grow and increase their profits.

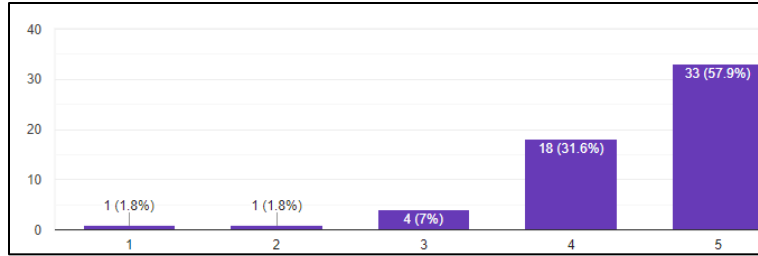


Figure (10): Using technology helps SMEs to increase profits.

- Using social media by small and medium enterprises helps them market their products, increase the number of their customers, and grow their profits.

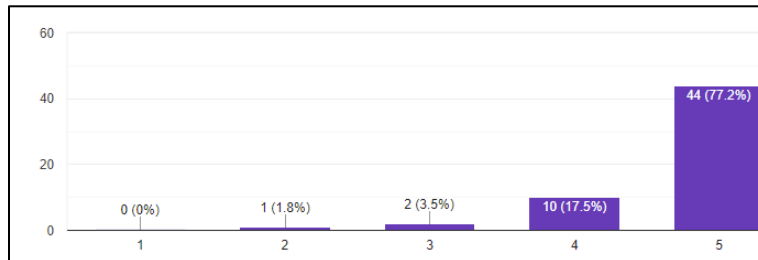


Figure (11): Using Social media helps SMEs market products, increase customers, and grow profits.

- The type of technology used in SMEs, depends upon the size and type of the business.

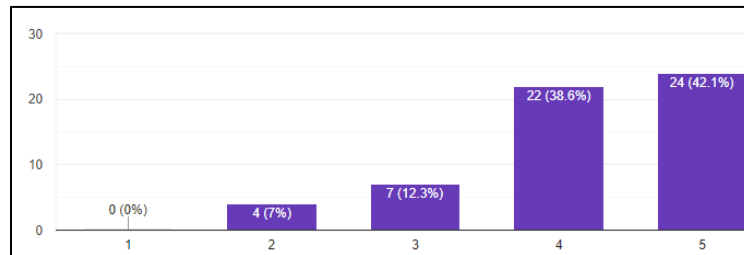


Figure (12): Using a type of technology in SME depends on the size and type of business.

Moreover, the results of open-ended questions indicate that most barriers that prevent SMEs in Ad'Dhahirah from using technology are lack of finance, lack of awareness of technology by SMEs owners, weakness of telecommunication infrastructure, and the high price of internet services. Also, the results show that the most social media platform used by SMEs in the Ad'Dhahirah governorate are Instagram, WhatsApp, and Twitter. In addition, it found out that the most basic computer programs used by SMEs in Ad'Dhahirah Governorate are Microsoft Office programs, especially Word and Excel programs.

### Discussion:

According to the above results, it is evident that there is limited use of technology in SMEs in Ad'Dhahirah Governorate for many reasons. The most important of which is the lack of awareness of the importance of using technology for the owners of these institutions and the weak communication infrastructure in the governorate, and the high prices of services provided by telecommunications companies. Therefore, there must be encouragement and motivation for these institutions to adopt the technology by all concerned with the small and medium enterprises sector at the state level.

### Conclusion:

In conclusion, this study demonstrated an urgent need to provide more support for SMEs in Ad'Dhahirah governorate to adopt technology to help them increase their productivity and improve their performance. Accordingly, we suggest the following:

- Provide special training courses and awareness programs to help the SMEs in Ad'Dahirah governorate adopt the technology.
- Develop the services provided by telecommunications companies to small and medium enterprises and provide special prices for them.

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