

## Chapter 39

# ICT Adoption in SME in an Arab GCC Country: Oman

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### ABSTRACT

*It has been widely recognized that Small and Medium size Enterprises(SMEs) not only play an important role in the economy of a country, but are crucial to the country's economic stability. This article reviews UN and World Economic Forum ICT indicators for assessing the adoption of Information and Communication Technologies (ICT) in Gulf Cooperation Countries (GCC). Also, it presents the results of an exploratory study carried out to learn about the adoption of ICT in SMEs in Oman. The study investigates infrastructure, software used, driver for ICT investment, perceptions about business benefits of ICT and outsourcing trends of SMEs. The study provides an insight on the barriers for the adoption of ICT. Data on these aspects of ICT was collected from 51 SMEs through a survey questionnaire. The results of the study show that only a small number of SMEs in Oman are aware of the benefits of ICT adoption. The main driving forces for ICT investment are to provide better and faster customer service and to stay ahead of the competition. A majority of surveyed SMEs have reported a positive performance and other benefits by utilizing ICT in their businesses. A number of SMEs outsource most of their ICT activities. Lack of internal capabilities, high cost of ICT and lack of information about suitable ICT solutions and implementation were some of the major barriers in adopting ICT. These findings are consistent with other studies. There is a need for more focus and concerted efforts on increasing awareness among SMEs on the benefits of ICT adoption. The results of the study recognize the need for more training facilities in ICT for SMEs, measures to provide ICT products and services at an affordable cost, availability of free professional advice and/or consulting services at reasonable cost to SMEs. Our findings can help policy makers focusing on ICT adoption by SMEs. Also, the findings of this research will provide a foundation for future research and will help policy makers in understanding the current state of affairs of the usage and impact of ICT on SMEs in Oman and other GCC countries.*

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## **INTRODUCTION**

Today organizations of all types are utilizing Information and Communication Technologies (ICT) around the globe, not only for cutting costs and improving efficiency, but also for providing better customer service. Governments, too, around the world are adopting ICT to provide better services to their citizens. The adoption of ICT by organizations requires a business environment encouraging open competition, trust and security, interoperability and standardization and the availability of finance for ICT (UNCTAD, 2004).

Most of the large and international organizations in GCC countries have effective computer systems to efficiently conduct business. A number of large organizations have spent huge amounts of money on installing computer systems to support their business processes. However, the situation has not been the same with SMEs - similar to other parts of the world for various reasons (Shiels et al., 2003, Fink and Disterer, 2006; Parker and Castelman, 2007). SME's do not have monetary and human resources to acquire, maintain and utilize sophisticated ICTs.

Sultanate of Oman, with an area of 309,500 square kilometers and a population density of 9.3 per square kilometer, like other Arab GCC (Gulf Cooperation Council) countries is an emerging economy with a young population that heavily depends on its most abundant natural resource; crude oil and gas. Oman's capital, Muscat, has an area of 3,900 square kilometers and a density of 214 per square kilometer, which is the most densely populated area among governorates and regions in the country. It is also the most developed city in terms of infrastructure and services. Along with Saudi Arabia, Oman is the only Arab GCC country with number of nationals significantly higher than expatriates. Oman has a population of three million with two million Omanis and one million expatriates. In Muscat, however, the population of 0.84 million is almost equally divided between Omanis and expatriates.

The government is the biggest employer in Oman and has the highest rate of Omanization (employment of Omani nationals). This is followed by the financial institutions, especially the banking sector. The ICT infrastructure in Oman has seen significant growth, encouraging many organizations to adopt technology. Through government legislation, Omanization of various jobs has been forced, after 2000, in order to tackle, back then, relatively high unemployment rate among Omani nationals. This included low paid jobs and many business types within the retail sector. The government is also, through various programs, encouraging entrepreneurship (Ministry of National Economy, 2008).

The government of Oman has taken various measures to diversify the economy for sustainable development of the country and one of the major steps is to transform Oman into a digital society. The adoption of ICT will have significant positive consequences on SMEs and consequently on the economy of Oman. There is a dearth of data and research about the size and contribution of SMEs towards Oman's economy. Therefore, through this research, we would like to shed light on the effects and usages of ICT on SMEs in Oman and their current and future perceptions towards ICT. This study is based on the Net Impact Canada 2006 (Illuminas, 2006). The findings of this research will provide a foundation for future researchers and will help policy makers in understanding the current state of affairs of the usage and impact of ICT on SMEs in Oman. We collected the data through a survey of fifty one randomly selected SMEs in Muscat, the Capital of Oman. We will also take a comparative look at other GCC countries and how they are progressing at an international level in regards to ICT adoption.

*Definitions:* It is important to note that the term "ICT" in context of this research refers to the wide range of information and communication technologies. These technologies include products and services such as desktop computers, laptops, handheld devices, wired or wireless intranet, busi-

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