



# Automation of Processes in Omantel Wholesale

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Telecommunications sector is often considered as one of the most rapidly changing dynamic industries in the world. Products and services of this sector are changed very quickly. Moreover, the business of the telecommunications company develops and progresses through many internal processes and technologies at its core. The success of any enterprise in this dynamically developing external environment is decided to a great extent on its ability to adapt to swiftly in accordance with the changing market needs. Adopting automation process is one of the key strategy that is adopted by many enterprises that is most effectively functioning in the modern telecommunications industrial sector. The growth of the telecommunications sector in any country is highly looked upon as it is a main priority for any national economy. Omantel is the flagship company and the pioneer in telecommunication sector in the Sultanate of Oman and is currently the market leader. However, it is facing stiff challenges from the time when telecommunication sector got opened for private players. Assessing this situation there is a strong trigger to adopt automation process for its operations, especially in the wholesale department. This project attempts to investigate how significant the various triggers effect the decision of adopting automation process in Omantel Wholesale department. Then, it attempts to statistically quantify the influence of various key factors that affects the adoption of process automation in the Omantel wholesale department. Lastly a decision would be recommended by testing of hypothesis either in favour of adopting automation process or accepting the alternative that adopting automation process is not required for the time being.

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## Introduction

Telecommunications sector is often considered as one of the most rapidly changing dynamic industries in the world. Products and services of this sector are changed very quickly. Moreover, the business of the telecommunications company develops and progresses through many internal processes and technologies at its core. The success of any enterprise in this dynamically developing external environment is decided to a great extent on its ability to adapt to swiftly in accordance with the changing market needs. Adopting automation process is one of the key strategy that is adopted by many enterprises that is most effectively functioning in the modern telecommunications industrial sector. The growth of the telecommunications sector in any country is highly looked upon as it is a main priority for any national economy. Omantel is the flagship company and the pioneer in telecommunication sector in the Sultanate of Oman and is currently the market leader. However, it is facing stiff challenges from the time when telecommunication sector got opened for private players. Assessing this situation there is a strong trigger to adopt automation process for its operations, especially in the wholesale department. Oman Telecommunication Company (Omantel) is the first telecommunication provider in Sultan of Oman since 1970s.

Since establishment, Omantel has been providing the widest as well as the latest communication solutions to its customers. Omantel is working smart to meet the customer need by adopting technologies in their daily process and achieving the profitability growth. Varsity customers in region leads Omantel to structure based on the customer demand and functionalities. Therefore Omantel have three sale units: Consumer, Enterprise and Wholesale (Omantel, 2019). Omantel Wholesale is one of the sale unit. The main function of Omantel Wholesale is to provide Omantel



services to the internal and external licensing telecom company. Omantel Wholesale is leading the market with wide challenges over the world by delivering the efficient telecommunication services with best customer satisfaction experience (Wholesale, 2019).

Automation plays a very important role in the working of most companies. Hence most of the companies adopt modern technologies to increase profit, reduce labour cost, improve quality, increase the efficiency and reduce timeline. (Nguyen Van Tran, et al., 2019). This paper will aim at identifying the factors that affect the adoption of automation technology in Omantel Wholesale.

## **Aim of the research**

The aim of this research is to identify the factors that drive Omantel Warehouse to adopt any automation technologies. If the driving factors are identified then it becomes easy for the organization to handle the changes adopt technological changes easily.

The main aim will further be subdivided into the following objectives for the purpose of the study.

1. Identify the factors that drive and restrain omantel wholesale to adopt automation technologies
2. Evaluate how Omantel Wholesale could deal with these factors in order to facilitate the adoption of any automation technologies

## **Scope of the study**

In order to answer the research questions, deep focus in Omantel Wholesale with emphasis on the adoption of automation technologies in the selling system. To have a clear overview about all factors affecting adoption of any automation technologies in Omantel Wholesale, the main focus on the top management as they are decision maker, middle management as the main link between the top management the workers and lower floor as employee who is dealing with technologies in daily bases. Culture and innovation processes of Omantel Wholesale not including which their theories would not belong to the scope of the research. However, there will be a briefly explained how these aspect will drive to restrain the adoption of any automation technologies to have overall respective picture.

## **Research Methodology**

The study has made use of Simple Random sampling to draw 50 samples from the population which comprises of the employees of Omantel Wholesale. Simple percentage method will be used to analyze the collected data.

## **Theoretical Framework of the research**

Several authors have been suggested different reason why the companies automate their system. Goran Krpan pointed out lead time, quality and flexibility are some of the factors why companies looking for automation on their process (Goran.Krpan, 2018).Groover and Dr.R.S. Bridger have contributed more to discussion of automation and reasons behind automation (Groover, 2016), (Dr.R.S.Bridger, 2018).

With term of flexibility and efficiency the automation technology provide a competitive advantages on the economies for the organization with high labour cost countries. (Advameg, 2016). The automation technologies offer a quick production, more customization, more variety and fast responses to the customer equipment with lower labour cost (Nguyen Van Tran, et al., 2019).



According to Groover,2007 the following are the factors that trigger automation in any industry.

Increased labour productivity, Reduced labor cost, Reduced Routine manual or clerical tasks, Reduced Operation time, Improved Quality and accomplish processes that cannot be done manually. In addition to the reasons that have been given above, other researchers have also pointed out the triggers of automation (Olheger, 2010).

The adoption and use of automation technology by companies is a product of a series of different decisions, which most often comes from the comparisons of the benefits and the cost of the introduced automation technology. (Sonny Ariss, 2000)

Apart from the factors studied by various researchers, the following are few of the other factors that have been identified by the researcher. The Technology Acceptance Model (1989) and the Innovation Diffusion Model (1983) are the basis for the study and have been studied in depth to understand the factors affecting technology adoption.

The factors that influence can be divided into (i) Internal Factors and (ii) External factors

Internal Factors	External Factors
a) Culture b) Novelty c) Administration d) Company Size e) Human Resource	a) Country Rule and Regulation b) Technology Suppliers c) Customer d) Competition

**Table 1.**

Based on the survey that had been conducted, the following are the results that were obtained and are given in the annexure.



## Factor influencing Adoption of Technology in Omantel Warehouse





**Figure 1.** Findings of the study

## Empirical Findings of the Study

The empirical findings of the research paper clearly shows that there is good awareness among the employees of Omantel Wholesale on the factors that affect the adoption of technology. The awareness is equal for both the internal and external factors. This enables us come to a conclusion that since there is good awareness, it is easier for the organization to educate and train the employees to adopt to the change. Out of the internal factors identified, Innovation and Human Resources have the highest degree of awareness, followed by the size of the organization and the administrative changes. Culture does have an influence, but the degree of influence according to the respondents is comparatively low. So irrespective of the organization culture, the employees are convinced that the technology can be and should be adopted to improve the performance of the organization.

With regard to the external factors, competition influences and triggers the adoption of better technology by the organization, followed by the technology adoption of the suppliers. The next influencing factor is the rules and regulations imposed by the country.

The overall understanding that can be derived is that the external factors and the internal factors have an equal influence on the adoption of technology. The employees feel that there is no significant difference on the influence exerted by internal or external factors.

## Conclusion

The aim of this research was to understand the awareness of the employees on the factors influencing the adoption of technology in Omantel Wholesale. A simple questionnaire was framed to understand the awareness percentage of the employees. The employees believe that the internal and external factors equally influence the adoption of technology. Hence when training needs to be given to employees when a new technology is being adopted it makes it easier for the organisation to train the employees. Even adoption of newer technologies can be made keeping in mind the influencing factors.

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**Annexure**

Criteria	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
There are quite a lot of forces that drive the automation of Omantel.	25	12	7	6	0
There is a strong awareness of the internal factors that affect the automation	25	16	4	5	0
Culture of the company affects the automation process	19	11	12	4	4
The degree of innovation is quite high and it has an impact of the degree of automation	30	11	4	5	0
The company administration influences the way the automation happens in the telecom industry	21	12	10	4	3
The automation process in Omantel Wholesale is comparatively quicker and easier because of the size of the organization	20	16	4	5	5
The Human Resources of the company has influenced the adoption of automation in Omantel Wholesale	29	11	10	0	0
The external factors that affect the automation process can be easily related to	25	16	4	5	0
The rules and regulations that govern the telecom industry influences the extent to which automation is	20	12	10	4	4



encouraged in the organization					
The level at which technology is adopted by suppliers also influences the adoption of technology by Omantel Wholesale	21	19	5	5	0
Customers also influence the adoption of technology in Omantel Wholesale	18	12	10	6	4
Existence of competition has an impact of the technology that is adopted	25	15	5	5	0

**Table 2.**