

**THE ROLE AND IMPACT OF INFORMATION  
TECHNOLOGY TOWARDS THE  
UNEMPLOYMENT RATE  
OF HUMAN RESOURCE  
MANAGEMENT**

MUNITA TAN  
PB12037

BACHELOR OF PROJECT MANAGEMENT  
WITH HONOURS  
UNIVERSITI MALAYSIA PAHANG

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MUNITA TAN

Report submitted in partial fulfillment of the requirement  
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## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in term of scope and quality for the award of the degree of Bachelor of Project Management.

Signature :

Name of Supervisor : MADAM ZARITH SUFIA BINTI AZLAN

Position : LECTURER

Date :

**STUDENT'S DECLARATION**

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

Signature :

Name : MUNITA TAN

ID Number : PB12037

Date :

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## ABSTRACT

Information technology or IT is the term encompasses all form of technology which is used to create, store, retrieve, transmit, exchange and use up the information in various type of methods. IT has become and a very important and the basic to ensure and support the business processes in organizations. On the other hand, the presence of information technology indicates that the organizational change is skill-biased. Therefore, it is important for us to analyze the effect of organization and technological change to determine the process that will associate with changes. Hence, there are two objectives in this research that aims to be achieved. There are to determine the role of information technology in the human resource and to analyze the impact of information technology on the unemployment rate in the human resource management. The respondents of this research are the SME ICT companies in Penang, Malaysia. The research data are collected from the 46 respondents by email and phone call. The overall analysis was done by using SPSS. For achieving the first objective, mean test was used whereas Pearson Correlation was used to achieve the second objective. The results showed the rank of the role of information technology which communication was the first, followed by management information system, inventory management, customer relationship management and data management. In conclusion, the findings of this research also showed that there is strong positive and significant relationship between the role and impact of information technology towards the unemployment rate of the human resource management.

## ABSTRAK

Teknologi maklumat atau IT adalah istilah yang merangkumi semua bentuk teknologi yang digunakan untuk membuat, menyimpan, mendapatkan semula, menghantar, pertukaran dan penggunaan dari pelbagai segi. IT telah menjadi sangat penting dan asas untuk menyokong proses perniagaan dalam sesebuah organisasi. Namun, kehadiran teknologi maklumat menunjukkan bahawa perubahan organisasi lebih mementingkan kemahiran dalam seseorang itu. Oleh itu, adalah penting bagi kita untuk menganalisis kesan organisasi dan perubahan teknologi ini untuk menentukan proses yang boleh dibuat dengan mengaitkan dengan perubahan ini. Oleh itu, terdapat dua objektif dalam kajian ini yang perlu dicapai. Ia adalah menentukan peranan teknologi maklumat dalam sumber manusia dan untuk menganalisis kesan teknologi maklumat dengan kadar pengangguran dalam pengurusan sumber manusia. Responden kajian ini adalah syarikat SME ICT di Pulau Pinang, Malaysia. Data kajian yang dikumpul adalah daripada 46 responden yang dibuat melalui e-mel dan panggilan telefon. Analisis keseluruhan telah dilakukan dengan menggunakan SPSS. Untuk mencapai objektif pertama, purata digunakan manakala "Pearson Correlation" telah digunakan untuk mencapai objektif kedua. Hasil kajian menunjukkan peranan komunikasi adalah pertama, diikuti dengan sistem pengurusan maklumat, pengurusan inventori, pengurusan perhubungan pelanggan dan pengurusan data. Kesimpulannya, hasil kajian ini juga menunjukkan bahawa peranan dan kesan teknologi maklumat ke arah kadar pengangguran tenaga manusia adalah saling berkaitan di mana hubungan ini menunjukkan sangat positif dan ketara antara satu sama lain.

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 INTRODUCTION**

Information technology (IT) is the use of systems especially computers and telecommunication. IT has become and a very important and the basic to ensure and support the business processes in organizations. The shift towards IT acquisitions helps in aligning the business process, aiding the coordination mechanism and supporting transactions. However, there is risk if the alignment of the business process with IT is not handle well.

On the other hand, the presence of information technology indicates that the organizational change is skill-biased. This is due to the foremost reduction of net employment growth rates of unskilled and medium-skilled workers (Bauer and Bender, 2004). Human resource plays an important role in the alignment process especially in the pre-acquisition stage. This is to reduce the post acquisition shocks. Therefore, it is important for us to analyze the effect of organization and technological change to determine the process that will associate with changes. The top management needs to have a clear vision and the understanding on the business strategy to have a good management and control on the information technology.

#### **1.2 PROBLEM BACKGROUND**

The human resource has evolve and undergone huge changes over the last 5 decades. It has transformed many business and even enterprises. The small and medium

enterprises are able to stand the human resource management task without any specialize software, more or less successfully (Misra, 2006). On the other hand, the enterprise which has numerous employees and complex structure are no longer able to do that (Misra, 2006).

The intense competition, the outstanding performance by others, globalization are some the examples of changes that are occurring in the organization nowadays. Due to the intense competition, organization need to keep up by either re-organizing or re-profiling themselves (Mustsaers et al., 1998). Therefore, many organizations are considering implementing information technology to cope up with all these challenges.

The human resource management is multifaceted. It could range from the operational assistance in collecting, storing and preparing data for reports, simplifying and accelerating the process and controlling the available data. A proper manage human resource management could provide a competitive advantage in the industry because the management could focus more on the strategic management rather than focusing on the operational management.

Besides that, the organizations placed customer or clients needs first. Therefore, accuracy, speed and quality are the key element that they focus. By using IT in their human resource management, they could achieve that. One implication is that the nature of work is likely to shift due to the fact that information technology has the potential to change the roles of employees within organizations (Garners et al., 2003). The use of technology has indeed increase the productivity and generates better income for the organization. The large production has increase the economy but there is decrease in the job creation

Nevertheless, it has an impact on the unemployment rate. The traditional bureaucratic structure with many level of management is being replaced by new organization form. This new organizational form emphasize of cross functional teams. Therefore, they need only certain amount of workers compare to the traditional method. On the other hand , the presence of information technology indicates that the organizational change is skill-biased .This is due to the foremost reduction of net

employment growth rates of unskilled and medium-skilled workers (Bauer and Bender, 2004). The top management needs to have a clear vision and the understanding on the business strategy to have a good management and control on the information system.

### **1.3 PROBLEM STATEMENT**

The information technology has increase rapidly across the world because it plays an important role. The role includes the communication, inventory management, data management, management information system and customer relationship management. There are numerous changes in terms of social and organizational in the economic environment. Therefore, the human resource management needs to be up to date whether in quality, speed, flexibility and the upcoming trends. These entire factors could determine the success of a business. The use of information and communication technology has become an imperative for the human resource management (Dusmanescu and Bradic-Martinovic, 2011).

When an organization is too big or too complex, it is tough monitor. Therefore, technology is being applied into the human resource management to solve this problem. Companies, regardless of the size, have been implementing technology into their organization (Dusmanescu and Bradic-Martinovic, 2011). By doing so, information technology could cause employees to lose their job because it has streamlined the process and creating job redundancies, downsizing and outsourcing. Lower and middle level jobs are more affected because the information technology has replaced their position. Therefore, more people became unemployed.

In conclusion, the fast pace growth of information technology offers us more ways to conduct a business that are way different from the past. This shows that information technology has the potential to change the roles of employees within organizations (Gamers et al., 2003). It is important for us to analyze the effect of organization and technological change to determine the process that will associate with changes. The changes that occurs could have different type of implication such as increase in job destruction for unskilled labor, decrease in job creation for unskilled labor or the employ of latest technology is for the skilled workers whereas the unskilled workers are unaffected (Bauer and Bender, 2004). The main concern of the most of the