

INTEGRATION OF TOTAL QUALITY MANAGEMENT AND ENTERPRISE  
RESOURCE PLANNING TO ENHANCE ROYAL MALAYSIA POLICE  
PRODUCTIVITY PERFORMANCE

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A research project submitted in partial fulfilment of the requirement for the  
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(Innovation Technology) with Honours


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**APPROVAL FOR SUBMISSION**

I hereby declare that I have read through this report entitle “Integration Of Total Quality Management And Enterprise Resource Planning To Enhance Royal Malaysia Police Productivity Performance” and found that it ~~has~~ complied the partial fulfillment for awarding the Bachelor's Degree in Technology Management (Innovation Technology) with Honours.

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## DEDICATION

To my beloved parents and my supervisor Dr. Fam Soo Fen

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I would like to express my special thanks of gratitude to my supervisor, Dr. Fam Soo Fen for giving me a lot of guidance and useful advice in writing my research. She always try to explain and answer my question in the best way and giving me motivation all the time when doing this research.

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## ABSTRACT

The Royal Malaysia Police (RMP) is a uniformed centralized organization in federal police force in Malaysia. It is very important to maintain the stability and peaceful in the country. The responsibilities of police officers is to reduce crimes and maintain a safer community. Therefore, the police management has to ensure that the police forces functions in the more efficient way and effective while delivering their services. It is impossible to deliver a highest quality standard of services if the goals are not clear, organizational system and process is not determine in order to implement the strategies and tactics from the top management through leadership. Policemen are now facing the problem in the high administrative burdens and low remuneration. The police officers suffered long duty house of police forces increase their burdens in doing their jobs. Police officers can be consider as 24 hours- employee and gazette holidays are not admissible for them. Their salaries was also consider low-paid government employees that they could not afford the living cost and it will neglects their job performance. The main purpose of this research is to integrate TQM and ERP to enhance the RMP productivity performance. The aims is to investigate the perception of RMP on the integration of TQM and ERP in enhancing organization productivity performance. The following research objectives are to determine the relationship between TQM and ERP in the organization performance for the RMP; to propose the principles of TQM and ERP to increase the productivity in the RMP sector; and to identify the perception of TQM and ERP in RMP to enhance the productivity performance.

Keywords: Total Quality Management, Enterprise Resource Planning, Integrated system, Royal Malaysia Police, Productivity Performance, Police sector, Police services, administrative management

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**LIST OF ABBREVIATION**

<b>ABBREVIATIONS</b>	<b>TITLE</b>
TQM	Total Quality Management
ERP	Enterprise Resource Planning
RMP	Royal Malaysia Police
PLS	Partial Least Square
AVE	Average Variance Extracted
P-value	Probability Value
T-statistics	Test Statistics
H	Hypothesis
CSF	Critical Success Factor

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.0 Introduction**

The chapter one has introduce the background of the research including problem statement, literature review, model analysis and methodology will going to apply in this research. The scope of the research will also be explained in this chapter. This researcher will identify the research questions and provide the justification to support the research objectives. The problem statement will also be listed in this chapter. The literature review on past studies of Total Quality Management (TQM) and Enterprise Resource Planning (ERP) will be also presented in literature review which is chapter two. Finally, the contribution of this research has been highlighted in moving forward to the Eleventh Malaysia Plan, 2016-2020.

## 1.1 Background of Research

The Royal Malaysia Police (RMP) is a uniformed centralized organization in federal police force in Malaysia. It is very important to maintain the stability and peaceful in the country. The responsibilities of police officers is to reduce crimes and maintain a safer community. Therefore, the police management has to ensure that the police forces functions in the more efficient way and effective while delivering their services. It is impossible to deliver a highest quality standard of services if the goals are not clear, organizational system and process is not determine in order to implement the strategies and tactics from the top management through leadership. Besides that, the excellent services are very difficult to provide by the organization if their results are not measured and improved. As the explanation above, the key finding for the implementation is risky not only the strengths and weaknesses factors such as top management support, user involvement, clear defined goal and scope, adequate resources, effective leadership, clear communication and so on that will affect the benefits and problems for adoption in the organization(Shang Shari and Seddon, Peter B. , 2007).

Many quality management and business excellence tools/models are in use in private and public organizations, with each bringing benefits but also having various weaknesses when applied in practice (Dahlgaard, Chen, Jang, Banegas, & Dahlgaard-Park, 2013). The principles of TQM to increase the productivity will be propose in this research to bring the overall benefits to the organization especially in police sector. When an organization decides to introduce the model, it is of course also very important to use the model through the proper implementation process (Kanji, 1996). The perception of integration TQM and ERP in enhancing productivity performance in police sectors in very important before implementation of the process. It is to make sure the proper implementation process has been done during the integration of TQM and ERP in the RMP in enhancing the productivity performance.

ERP improves operational efficiency by integrating business process and providing better access to integrated data across the entire enterprise, while to enhance efficiency, a company may redesign its business practices by using the templates (or best practices) embedded in the ERP (T.Davenport,1998). This research is to propose the principles of ERP to increase the efficiency in the operational in police sector and enhance the productivity performance in Malaysia.



Integration of TQM and ERP will gain a lot of benefits to the organization in enhancing the productivity and the efficiency of government system in police sector. To assist the process of development, organizations have to adopt different philosophies and approaches including TQM (Oakland, 1999) and ERP (Uwizeyemungu & Raymond, 2010). TQM as a management philosophy can be one of those factors that help ERP system to achieve the desired goals in enhancing the productivity performance in the organization. It has been argued that TQM is prerequisite practice before implementing ERP system (Ghadilolae, Aghajani & Rahmati, 2010). This research will investigate the relationship between TQM and ERP in the organization performance for the RMP.

### **The organization of RMP**

This research is going to solve the problem of the high administrative burdens of the police officers. The integration of TQM and ERP in enhancing the Malaysia police productivity performance could help to reduce the high administrative burdens in the RMP sector. The target respondents in this research are police officers who work in the administrative departments. There are few departments which will include the administrative branches so that they will be our target respondents to answer for the survey form as our data. The departments are Management Department, Strategic Resources and Technology Management Department, Criminal Investigation Division and others police officers who have in charge of the administrative procedures or process in the police service sector.

### **Management Department**

The management department is the main support platform for all the police activities in the police services and all the routine management as well as the administrative affairs in the police organization. The first task of the management department is to manage the police services and resignation matter of all the police officers. It includes the recruitment of the new police officers, service record administrative process, promotion and transfer for the police officers, calculating the salaries and allowance for the employees and their retirement. Next, the general administration and policy in the police organization. The job includes Police Service General Administration, Civil Affairs and Welfare, Sports of the RMP and PERKEP (Persatuan Keluarga Polis or Police's Family Association, generally social activities for the



families of the policemen to improve their relationship). The last job is the training activities that provide for the police offices to increase their skills and power in the future. For example, basic course, development courses, rehabilitation courses and further studies. The high administrative burdens in this department can be solve by the integration of TQM and ERP in the future.

### **Strategic Resources and Technology Department**

This department is to provide and manage all the necessary equipment that needed by the RMP. There are five task consisted in this department. The first task is manage the budget for the operating and RMP's development process. The second task is planning, managing, operating and managing the communication, information technology, transport and weaponry when it is needed by the RMP for their duty. After that, the third task of the RMP in thus department is to maintain the buildings and properties in the police station and manage the projects for the RMP. Next, the fourth task is to manage the turnover and the supply of the general equipment needed by the RMP. Finally, the last task is to manage the assets of the RMP. All these task have to done by the strategic resources and technology department which created a high administrative burdens for the police officers.

### **Criminal Investigation Division (CID)**

This CID department is the critical department in the police sector in reducing the crimes and maintain a safe community in the country. CIS is the department which deals with the investigation of the criminal cases, arrest the convict, prosecution of the both violet crimes such as serious cases like murder, rape, robbery and the less serious cases like theft and house-breaking. Besides that, CID department also specialize in investigating the illegal gambling, vive and secret societies (triads) that will affect the safety of the community. The main three tasks in this department are investigation and detective duties, arrest and prosecutions, enforcement of laws related to gambling, vice and secret societies to maintain the safety. All these activities will also include some of the administrative process which will increase the burdens of the police officers. The problems can be solve by the integration of TQM and ERP in the police services.

## The Branches of the Department

The table below shows the branches which include the administrative division in every department and our target respondents are the police officers which are working in this following department.

Branches of the Department		
<b>Management Department</b>	<b>Strategic Resources and Technology Department</b>	<b>Criminal Investigation Division (CID)</b>
Administration	Naziran's Branch/Administration	Administrative Division
Welfare	Communications Branch	Criminal Record Administration Division
Training	Information Technology Branch	Anti-Human Trafficking/ Migrants Smuggling Prevention Division
Research and Development	Transport Branch	Operation/ Intelligence/ Records Divisions
Services/ Resignation	Finance Branch	Prosecution and Law Divisions
Public Affairs	Technical Turnover	Technical Assistance Division
Public Relations	Weaponry Branch	Gambling/ Vice/ Secret Societies Prevention Division
Intake	General Turnover	Investigation/ Planning Division
Ceremonies	Part of the Building	Special Investigation Division
Camp Commandant	Disposal/ Stock/ Verification/ Write-off	Forensic Laboratory Division
RMP sports Council		Sexual/ Domestic Violence/ Child Abuse Investigation Division

		National Centre Bureau Interpol Division
		Databank DNA Division
		Organized Crime Investigation Division

**Table 1.1: Branches of the Selected Department**

## 1.2 Justification of Research

This research is to stimulate the efficiency and cost effectiveness of government system especially in the police sector. The integration of TQM and ERP to enhance the RMP productivity performance and the training have to be given to the police officers in Malaysia to implement the system in the future. The perception on the integration of the TQM and ERP in police services will help to enhance the organizational performance and increase the productivity in the government sector have to be identified in this research.

A result of successful implementation of ERP in the police sectors in United Kingdom has proven that it can reduce the administrative burden on officers and staff. Moreover, it also enabling the forces to deliver even better policing for their communities. The ERP system, based on the Microsoft Dynamics platform, will cover a wide range of distinct functional areas within the wider operation of the police forces including finance, fleet, human resource management, learning and development, payroll and duty management (Consultancy.uk, 2016). In the Eleventh Malaysia Plan, it has targeted rationalizing public sector institutions for greater productivity and performance as well as enhancing service delivery with citizens at the centre. This research will contribute in the public sector for the greater productivity and performance to deliver the service by the police officers to the citizens in Malaysia.



### 1.3 Problem Statement

Malaysia's public service transformation must move ahead to adopt a balanced development approach in equal emphasis to boost economic growth and well-being. The target of Eleventh Malaysia Plan, 2016-2020 are rationalizing public sector institutions for greater productivity and performance and enhancing service delivery with citizens at the centre. The main focus in this research is the transforming public service for productivity in the police sector. The current features of government shared service is to increase the cost effectiveness and efficiency of government system even more in enable customer-centric support deliveries.

Policemen are now facing the problem in the high administrative burdens and low remuneration. The police officers suffered long duty hours of police forces increase their burdens in doing their jobs. Police officers can be consider as 24 hours-employee and gazetted holidays are not admissible for them. Their salaries was also consider low-paid government employees that they could not afford the living cost and it will neglects their job performance. Some police personnel have been involved in corruption due to financial problems. It is tough for low-ranking police personnel, who earn slightly more than RM1, 000 a month, under a salary scale of between RM1, 014 and RM3, 517 for a constable, to survive in big cities like Kuala Lumpur. Those who did not get police quarters have no other option but to fork out almost half of their salary to rent a room or small house in a big city. Those who cannot afford it have to share a cramped house or room, or look for cheaper alternatives on the outskirts (Tan Sri Lee Lam Thye, 2017). The increase of population in the country and out-numbered of police force as well as the non- corporation of public in arresting crimes because they scare of criminal threats while joining the investigation have to be solve to maintain the safety and security in Malaysia.

The many tasks of the new IGP, Datuk Seri Mohamad Fuzi Harun, should include ways to improve the welfare of his men and women, including providing better allowances and accommodation. Although most of the police quarters have been upgraded and new ones are being built with better features and facilities, there are still those which need to be refurbished, particularly those which have been occupied for years and are in poor condition (Tan Sri Lee Lam Thye, 2017). The integration of TQM and ERP to enhance RMP productivity performance will helps to overcome the

following problems. It will help to save time in the administrative management and enhance the efficiency of the system. The duty hours of the police officers can be curtailed and it will improve the strength of police force as well as reduce the administrative burdens of the police officers. It also helps to increase cost effectiveness of the government system in police sectors. The pay scales can be revised and enhanced by using the TQM and ERP in the police sectors and increase the living standard of the policemen. Furthermore, the public also can be educated to discharge their responsibilities as a good citizen during implementation process and get a more quality service for community.

The RMP have distinctly high in terms of the public satisfaction with their services with the score of 85.7% public satisfaction rate in the year of 2013 and 92.5% public satisfaction rate in the year of 2014 (Sipalan, 2015). However, it is a manifestation that several Malaysia citizens did not satisfied with the police service performance to extent of 75% from the respondents reported the police service performance satisfaction level is low and some of the educated respondents suggested that the police force could do more to improve their job performance (Azyanee et al., 2013). A survey has been done in Selangor about the satisfaction of police service job performance which the results shows that only 38.8% respondents rating satisfied for the job performance delivered by the police force. So, the police efficiency towards the public safety is still a challenge that the RMP should overcome in the future to maintain a safer community (Ishak, 2016). On this research, the researcher will evaluate the integrated system of TQM and ERP in enhancing the police productivity performance to overcome the challenges as well as to improve the job performance and quality service in RMP.

The goal of this research to determine the relationship between TQM and ERP in the organization performance for the RMP. Next, the research objectives is to propose the principles of TQM and ERP to increase the productivity in the RMP sector and the last is to identify the perception of TQM and ERP in RMP to enhance the productivity performance. The questionnaire will be distributed to the policemen to identify their perception of the integration of TQM and ERP to enhance the productivity performance.

## 1.4 Significant of Study

The research has been focused on the contribution of the research towards the society. Some of the significant research has been carried out such as TQM in public administration organizations: an application data envelopment analysis in the police service (Nina Tomazevic, Janko Seljak, Aleksander Aritovnik, 2015) was contributed to the European Union which analyze the efficiency of using the TQM in the police service. In this research, the researcher are going to test the hypothesis in Malaysia by integration of TQM and ERP in enhancing the productivity performance in the police sectors. The study will highlight the principles of TQM and ERP to enhance the organizational productivity performance as well as the perception of RMP in the context of Malaysia.

The second significant study are the implementation factors that influence the ERP benefits (Shih-Wei Chou, Yu-Chieh Chang, 2015) that explained the factors which benefits the organizational performance and increase the productivity. The benefits of the ERP in enhancing the organizational performance will affect the perception of RMP so that it assist in the principle of TQM and ERP which bring the benefits to enhance the productivity performance. The research model are very useful to determine whether the TQM and ERP will helps to enhance the productivity performance in the organization.

The third significant study is the study of the technology factors, ERP system and organization performance in developing countries (Ibrahim Egdai, M Farizal Rajemi, Santhirasegaran Nadarajan, 2016). This study is proposed the adoption system and organization performance as well as the organizational technology factors on the relationship of ERP system and organizational performance. This study will contribute in this research to answer the first research objectives with the relationship between ERP system and organizational performance. The study also highlighted in the developing countries and it has significant in this research because Malaysia is a developing countries.



### **1.5 Research Questions**

The research questions will be focusing on the integration of TQM and ERP system in the police sector. The research questions will decide the finding in this research and also the research objectives. The research questions are:

- What is the relationship between Total Quality Management and Enterprise Resource Planning in the organization performance for the Royal Malaysia Police?
- What are the relationship between Total Quality Management and Enterprise Resource Planning in the organization performance for the Royal Malaysia Police?
- What are the perception of Total Quality Management and Enterprise Resource Planning in Royal Malaysia Police to enhance the productivity performance?

### **1.6 Research Objectives**

The main purpose of this research is to integrate TQM and ERP to enhance the RMP productivity performance. The aims is to investigate the perception of RMP on the integration of TQM and ERP in enhancing organization productivity performance. The following research objectives are:

- To determine the relationship between Total Quality Management and Enterprise Resource Planning in the organization performance for the Royal Malaysia Police.
- To propose the principles of Total Quality Management and Enterprise Resource Planning to increase the productivity in the Royal Malaysia Police sector.
- To identify the perception of Total Quality Management and Enterprise Resource Planning in Royal Malaysia Police to enhance the productivity performance.

## 1.7 Scope of Research

The scope of the research has been differentiated into three sections which are the scope, limitations and key assumptions. The details below are explaining about the scope of this research on the integration of TQM and ERP in enhancing the RMP productivity performance.

### 1.7.1 Scope

This research has been chosen head section police officers in Malacca, Malaysia to be the respondent because they are the middle managers as a link between managers and the employees in the police station. The implementation of TQM and ERP in the police sector will give a lot of benefits in the organization performance. Besides that, TQM and ERP will achieve the efficiency and cost effectiveness of government system in police sector. It also reduces the high administrative burdens of police officers and increases their remuneration as well as increases the quality services in the public organisation. The main discussion of this research is to investigate the relationship between integration of TQM and ERP and the principles of the police officers in the organization performance to enhance the productivity performance of RMP. Moreover, this research also investigates the perception of police officers on the integration of TQM and ERP. The review of past studies will focus on the relationship and principles between TQM and ERP. The questionnaire will be provided to the head section police officers in Malacca, Malaysia to identify the perception of integration of TQM and ERP in the organization performance.