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# SHIELDING MALAYSIA DIGITAL BANKING REPUTATION THROUGH AN INTEGRATED MODEL OF TOTAL QUALITY MANAGEMENT AND KNOWLEDGE MANAGEMENT

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The report is submitted in partial fulfilment of the requirements for the award of Bachelor of Technopreneuship

Faculty of Technology Management and Technopreneurship
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# **DECLARATION OF ORIGINAL WORK**

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# **DEDICATION**

I would like to dedicate the appreciation to beloved parents who supported me from spiritually and financially. A special thanks to my supervisor and panel who guided me throughout this research and even thanks to my friends that helped and assisted me through the journey of research.

## ACKNOWLEDGEMENT

I would like to take this opportunity to express my sincere appreciation to my supervisor Dr Fam Soo Fen for guidance and encouragement throughout the journey to complete this final year project. Throughout her guidance, I managed to finish my final year project successfully within the time frame given. Besides, there are some other important people involved in this final year project, for instance my beloved lecturers, friends and course mates. I am deeply grateful for the guidance and support towards this project as play as an important role for this project.

Next, I am sincerely thanks to the researchers that they have previously conducted the similar study and published online. Although the research topic of the study was different, but the theory and knowledge provided were useful as a reference in this final year project.

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### **ABSTRACT**

Digital banking service is considered as the new revolution of banks in nowadays. The skills of digital banking service still not mature in Malaysia yet. Hence, there need some tools to pretend any issues happened. This purpose of this study is to investigate the relationship between total quality management (TQM), knowledge management (KM) and bank reputation in digital banking Malaysia. TOM core elements include customer focus, top management commitment, human resource management, continuous improvement, leadership, training and education, and trust. KM processes included knowledge acquisition, knowledge sharing and knowledge application. This study is considered as exploratory research and quantitative method is used. The questionnaires are distributed to the executive management team level and above in bank. IBM-SPSS is used to analyse the collected data from respondents. PLS-SEM is used to examine the relationship between latent variables. As a result, TQM have a positive and significant effect on KM and bank reputation. KM has a positive and significant effect on bank reputation. KM have been tested as the partial mediation between TQM and bank reputation. Therefore, this research is expected to provide deep understanding regarding TQM, KM and bank reputation in digital banking service Malaysia and make some contribution to academia research.

Keywords: Total Quality Management (TQM), Knowledge Management (KM), Bank Reputation, Digital Banking

### **ABSTRAK**

Perkhidmatan bank digital dianggap sebagai revolusi baru dalam masa kini. Kemahiran digital perkhidmatan perbankan masih tidak matang di Malaysia. Oleh itu, ia memerlukan beberapa alat untuk mengelakkan akibat yang tidak diingin berlaku. Tujuan kajian ini adalah untuk menyiasat hubungan antara pengurusan kualiti menyeluruh (TQM), pengurusan pengetahuan (KM) dan reputasi bank di Malaysia perbankan digital. Elemen teras TQM termasuklah tumpuan pelanggan, komitmen pengurusan atasan, pengurusan sumber manusia, penambahbaikan berterusan, kepimpinan, latihan dan pendidikan, dan Amanah. Proses KM termasuk pemerolehan pengetahuan, perkongsian pengetahuan dan aplikasi ilmu. Kajian ini dianggap sebagai penyelidikan dan kaedah kuantitatif digunakan. Borang soal selidik yang diedarkan ke peringkat pasukan pengurusan Eksekutif dan ke atas di bank. IBM-SPSS digunakan untuk menganalisis data yang dikumpul daripada responden. PLS-SEM ini digunakan untuk meneliti hubungan antara pembolehubah yang terpendam. Sebagai hasilnya, TQM mempunyai kesan yang positif dan signifikan terhadap reputasi KM dan bank. KM mempunyai kesan yang positif dan signifikan terhadap reputasi bank. KM telah diuji sebagai pengantaraan separa antara reputasi TQM dan bank. Oleh itu, kajian ini dijangka dapat memberi kefahaman yang mendalam mengenai reputasi TQM, KM dan bank dalam Perkhidmatan Perbankan digital Malaysia dan memberi beberapa sumbangan kepada ahli akademik penyelidikan.

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ATM  $\equiv$  Automated Teller Machine

AVE = Average Variance Extracted

CFA = Confirmatory Factor Analysis

CIMB = Commerce International Merchant Banker Berhad

CR = Composite Reliability

DBS = Development Bank of Singapore Limited

EFA = Exploratory Factor Analysis

GDP = Gross Domestic Product

HSBC = Hongkong and Shanghai Banking Corporation

IT = Information Technology

KM = Knowledge Management

KMO = Kaiser-Meyer-Olkin

MBNQA = Malcom Balrige National Quality Award

PLS = Partial Least Squares

RHB = Rashid Hussein Bank

SDG = sustainable development goals

SEM = Structural Equation Modelling

SPSS = Statistical Package for the Social Science

TQM = Total Quality Management

UOB = United Overseas Bank

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### CHAPTER 1

## INTRODUCTION

## 1.1 Introduction

This chapter is beginning with background of the research, a briefly introduction of Malaysia bank industry and digital banking services. After that, problem statement regarding topic described, followed with construct research questions and research objectives based on problem statement. Significant of study, scope and limitation also have been mentioned. The chapter ends by the structure of research.

# 1.2 Background of Study

Economy always is a critical and significant issue to every country even in global. The eighth goals of sustainable development goals (SDGs) is concerned about decent work and economic growth. One of the strategic thrusts in Malaysia Plan-11 is

re-engineered economic growth for increasing prosperity. Gross Domestic Product (GDP) is a statistical method to represent economic performance according to figure shown in a region or country. According to Department of Statistics Malaysia, service sector has the major contribution (54.5%) to GDP Malaysia total RM1,174.3 billion in year 2017. Financial service is one of the key contributors in service sector.

Banks is one of the board range of business in financial services. Bank plays a vital role in developing a progressive and inclusive financial industry that involves maintaining the key principles of financial stability at all times, ensuring effective and effective financial intermediation, and contributing to economic growth and development. There have two common types of banks in world: Central Banks and Islamic Banks. Central Bank is a financial institution that owned by government to manages state's currency, money supply and interest rate (Forder, 2005). Central Bank usually act as control the conventional banking system in their own country. Islamic Bank is a financial institution that apply the concept of Islamic law (Sharia Law) in their operation which is prohibited interest (Chapra, 2000). All banking activities in Islamic Bank cannot violate the rule of Islamic law. Malaysia have owned conventional banks and Islamic banks due to the requirement of residents Malaysia.

Bank activities can be divided in to private banking (providing wealth management services to high-net-worth individuals and families), business banking (providing service to mid-market business), corporate banking (directed at large business entities), retail banking (dealing with individual or small business), and investment banking (relating to activities on the financial markets). It is designed to the different requirement from customers in term of attract and satisfy the needs of customers. Bank plays a role act as a financial intermediary between lenders and borrowers indirectly and act as the backbone of any economic system (Luckett, 1994). Bank plays as one of the key components in financial sector, it could allocate the fund from savers to borrowers systematically. Moreover, they offer a set of specialized services regarding finance in order to mitigate the cost of gaining the documentation regarding savers and borrowers. In overall, these financial activities help entire sector to perform in efficient way and improve performance in term of financial (Econ, 2001). For example, when a person needs a huge money to start-up business, buying house or make other investments, bank is one of the most reliable and efficient lenders in order to get the money in short time.

Banks also need to keep improving, updating and changing their service with the fluctuating market and needs of customers. Majority of banks have providing a new service, named as "Digital Banking" to enhance customer experience. There might have confusing between Online banking and Digital Banking. Online banking is part of digital banking. Online banking is also known as internet banking or electronic payment system. The simple explanation is checking balance, transferring money and paying bills through online either desktop or smartphone. All the conventional banking activities only provide services to customers when they are physically in the branch of bank while digital banking is moving toward digitalization which ease the process of banking activities and convenience to customers. A comprehensive consolidation of projects by bank at front-office, middle-office, back-office to enable entire journey of digital banking. In other words, digital banking has the same features as headquarters, branch office, online service, bank cards, ATMs and sales point computers.

In 2016, the Development Bank of Singapore Limited (DBS) had won an award of "World's Best Digital Bank", that a truly digital financial institution. DBS launched the digibank (the first-mobile-only bank) in India which are paperless, signatureless and branchless (Panchal, 2018). All the bank activities such as account opening services, credit card application, financial investment advice service, loan application, and more are through connect online smartphone. If customer need cash, just withdraw it from India's local bank (ALTO and ATM Bersama). In Malaysia, CIMB bank is started moving forwards to digital banking services due to the trends of market and needs of customer. CIMB Bank Bhd CEO said more than 95% of customers' transactions are performed via digital or self-service platforms (Dhesi, 2018). Apart from CIMB bank, digital banking also performed in Hong Leong bank, Maybank, Public bank, RHB bank, and UOB bank (Vincent, 2018).

Malaysia still in earlier stage of adopting digital banking. There might have some challenges occurred during this adopting stage. Customer always seek for flawlessly and highly efficiency services. High reputation bank will be the main choices of customer. Once there any rumours such as bank going bankrupt, peoples will rush to withdraws their money (Prasad, 2017). Hence, reputation can influence decision and confidence of customer. Therefore, there need to have a precautionary measures or guidelines on digital banking.

One of the suggestions is implementing Total Quality Management (TQM) in digital banking service. TQM is commonly known as a major management practice to control the quality of product or service to improve organizational performance. Empirical studies have shown that there have a strong and positive relationship between TQM and organizational performance through promote the service quality (Alex, 2017; Hana et al.,2016; Faisal et al.,2013). In past studies, researchers found that TQM can be implemented in service sector such as banking sector in customer satisfaction, service quality and so on. However, there still do not have much research on digital banking services. In order to perform a premium service in digital banking, TQM need to be implemented.

Another suggestion that can implement in digital banking is Knowledge Management (KM). KM can be defined as efficient handling (creating, sharing, using, and managing) of information and resources within a commercial organization. KM can also be used in decision-making process where can help organization transform virtual ideas to real products or services. Digital banking is a service that need a certain knowledge to proceed either employee or customer. Therefore, implement TQM and KM in banking will have a great contribution in digital banking service.

## 1.3 Problem Statement

With the ever-changing nature of technology, traditional banks are moving their operation service towards to digital banking. This is a digital transformation in banking industry. All the conventional banking activities only provide services to customers when they are physically in the branch of bank while digital banking is moving toward digitalization which ease the process of banking activities and convenience to customers. These activities include withdrawals, transfer, checking or saving account management, money deposits, applying for financial products, bill pay and account services. Young generation are more prefer to digital banking compared to traditional banking services. This is because they do not want to spent time on drive

to bank, queuing and waiting. On the other hand, baby boomers still insist the traditional banking service, it can be due to they are lacked IT savvy, or they lacked confident on security of digital banking services.

Financial crime is considered as one of the biggest challenges in banking. The financial crime is a concern of entire society due to its case number has gradually increased in world. The financial crime brings various negative impact in different level and result in hot topic throughout the world. In general, financial crime is covering wide range of offences. For instance, electronic crime, money laundering, terrorist financing, fraud, bribery and corruption, market abuse and insider dealing, and information security. One of the most common tricks is offenders ask Malaysian housewives to help them to do transaction with a huge amount through their account and transfer money to another oversea account by giving a few hundred Ringgit Malaysia as commission to them. Those who lacked knowledge or awareness housewives will believe this trick as a simple and quicker way to earn their extra pocket money (Triona, 2018).

Terrorist financing is mean as terrorist related firms attain their goals and terrorist group by make use of financial support. Terrorist will use these illegal financing to buy their weapons for going destroying their aims. One of the examples is occurring in HSBC Holding Plc (seventh largest bank in the world) in year 2016. At that time, HSBC was sued by American families involved in deaths by organized-crime gangs for processing at least \$811 million in cash for the Mexico' Sinaloa cartel (regarded as the most powerful drug gang in the world, according to US authorities) (Tom, 2016). In the same year, the net profit of HSBC bank fell 82 per cent compared to 2015 (The Straits Times, 2017), and its shares despite the 29% fall in first-half profits to \$9.7bn (Jill, 2016).

All these criminal issues occurred will affect the reputation of bank which also will reduce confidence of customer towards to bank (Tim, 2016). This issue happened might be due to the careless of employees in banking or employees do not have such knowledge to handling or checking. As staff of bank, they have the responsibility to aware and prevent these crimes to be occurred. In this case, bank need to have the system as protection to prevent any mishap happened. All related staffs of bank should also be trained and educated to face these problems. On the other hand, good reputation

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can be continuing to get the trust and confident from customer. Moreover, it is not only

can sustain even to attract new customer. As a result, in this research to develop TQM

and KM to overcome the financial crime in digital banking in order to shield the bank

reputation.

Integrated model of total quality management (TQM) and knowledge

management (KM) are beginning from Vincent and Reza (2004). The researcher said

that TQM can help to produce superior products and attain extreme high satisfaction

in customer perspective that is a competitive weapon in e-Commerce. On the other

hand, KM could gain synergy from TQM experiences because the significant

commonalities. The researchers concluded TQM and KM is a two-way path and both

disciplines can benefit from each other. Siew et al. (2011) proved that the integrated

model of TQM and KM have a positive significant impact supply chain learning. The

study showed the TQM practices has a positive impact to KM achievement. In this

research, the integrated model of TQM and KM is to determine the effect on bank

reputation.

1.4 Research Questions

From the previous section, TQM and KM are proposed to shield the bank

reputation. Consequently, the following research questions were formulated.

RQ1: What is the relationship between TQM and Bank Reputation?

RQ2: What is the relationship between KM and Bank Reputation?

RQ3: What is the interrelationship between TQM, KM and Bank Reputation?

# 1.5 Research Objectives

This study aims to determine the role of TQM and KM in shield bank reputation. These objectives are constructed and need to be answered at the end of the study.

RO1: To investigate the relationship between TQM and Bank Reputation

RO2: To determine the relationship between KM and Bank Reputation

RO3: To find out the structural relationship between TQM and Bank Reputation through the presence of KM

# 1.6 Significant of Study

This research has contributed for the future research in the digital banking services. The research related to the digital banking service is fewer due to this is the new era technologies service to bank industry. TQM had been implemented in manufacturing and service industry from past but yet have the research suggest implement TQM in digital banking services. Hence, this study expect implement TQM in digital banking service can help to shield the bank reputation at the same time. This study also proposes a relationship between TQM and bank reputation. TQM always linked with the organisational performance and financial performance which the bank reputation did not mentioned before it. This attempt will provide further justification on how the element practices of TQM are connecting with the scale of reputation. Besides that, digital banking service need a certain level of knowledge to understand and operate it. In this case, KM is suggested act role as the mediator to make the digital banking processing smoothly and efficiently in the management team of bank.