THE RELATIONSHIP BETWEEN BUSINESS PROCESS RE-ENGINEERING
(BPR) AND PERFORMANCE OF ISLAMIC BANKING BRANCHES IN KEDAH
FROM THE PERSPECTIVE OF MAQASID AL-SHARI'AH

By

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DECLARATION

I declare that the thesis work described in this research paper is my own work (unless otherwise acknowledged in the text) and that there is no previous work which has been previously submitted for any academic Master's program. All sources quoted have been acknowledged by reference.

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ABSTRACT

The purpose of this study is to investigate the relationship between Business Process Re-Engineering (BPR) and performance of Islamic banking branches in Kedah from the perspective of Maqasid Al-Shari'ah. BPR factors are operationalized by strategic alignment, management commitment, change management, customer focus, BPR project management and IT infrastructure. The questionnaires were sent directly to branches and collected by hand. Simple random sampling was used for sample selection. 63 questionnaires were sent to managers' Islamic banking, 59 samples were returned but only 54 samples were used for data analysis. The data was analyzed using '*Statistical Package for Social Science*' SPSS version 21. Collectively, the result shows that the BPR are able to influence the performance of Islamic banking in Kedah branches. The BPR are able to influence overall performance of Islamic banks and others three (3) dimension of performance (educating individual, establish justice and public interest). However, for individually, analysis using multiple regression analysis indicates that only management commitment, customer focus and BPR project management are able to influence overall Islamic banking performance. In term of dimension banks performance, customer focus and BPR project management are influences dimension of educating individual. While, in dimension of establish justice and public interest, only customer focus are able to influence. Therefore, the managerial of Islamic banking in Kedah branches should focus on the management commitment, customer focus and BPR project management in order to enhance the performance of their banks. The outcome of this study provides important insights to both managers and researchers for further understanding about BPR factors and Islamic banks performance.

Keywords: Business Process Reengineering, Islamic Banking Performance, Maqasid Al-Shari'ah

ABSTRAK

Tujuan kajian ini dijalankan adalah untuk mengkaji hubungan diantara faktor-faktor perekayasaan proses perniagaan (BPR) terhadap prestasi perbankan Islam di Kedah berdasarkan perspektif Maqasid al-Syariah. Faktor-faktor BPR dioperasikan melalui strategi penjajaran, pengurusan komitmen, perubahan pengurusan, berfokuskan pelanggan, pengurusan projek BPR dan infrastruktur IT. Soal selidik dihantar terus kepada cawangan dan dipungut dengan tangan. Persampelan rawak mudah telah digunakan dalam pemilihan sampel. Sebanyak 63 soal selidik telah dihantar kepada pengurus-pengurus perbankkan Islam, 59 sampel telah dikembalikan, tapi hanya 54 sampel digunakan dalam analisis ini. Data dalam kajian ini dianalisis dengan menggunakan 'Statistical Package for Social Science' SPSS versi 21. Secara kolektif, keputusan kajian menunjukkan bahawa BPR dapat mempengaruhi prestasi cawangan perbankan Islam di Kedah. BPR dapat mempengaruhi prestasi keseluruhan bank-bank Islam dan tiga (3) dimensi prestasi lain (mendidik individu, mewujudkan keadilan dan kepentingan umum). Bagaimanapun, secara individu, analisis yang menggunakan regresi berbilang menyatakan bahawa pengurusan komitmen, berfokuskan pelanggan dan pengurusan projek BPR dapat mempengaruhi prestasi perbankan Islam secara keseluruhan. Dari segi dimensi prestasi bank-bank, berfokuskan pelanggan dan pengurusan projek BPR dapat mempengaruhi dimensi mendidik individu. Manakala, dari segi dimensi mewujudkan keadilan dan kepentingan umum, hanya berfokuskan pelanggan yang dapat mempengaruhi. Oleh itu, pengurusan perbankan Islam di cawangan Kedah perlu memberi fokus kepada pengurusan komitmen, berfokuskan pelanggan dan pengurusan projek BPR untuk meningkatkan prestasi bank-bank mereka. Hasil kajian ini dapat memberikan pandangan penting kepada pengurus dan penyelidik untuk pemahaman lanjut tentang faktor-faktor BPR dan prestasi perbankkan Islam.

Kata kunci: Perekayasaan Proses Perniagaan, Prestasi Perbankkan Islam, Maqasid Al-Shari'ah.

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Abbreviation		**Meaning**
BNM	=	Bank Negara Malaysia
BIMB	=	Bank Islam Malaysia Bhd.
MD	=	Managing Director
GIFF	=	Global Islamic Finance Forum
BPR	=	Business Process Re-engineering
IT	=	Information Technology
RBV	=	Resource-Based View
ROI	=	Return On Investment
EPS	=	Earnings per Share
ROE	=	Return On Equity
DIB	=	Dubai Islamic Bank
IDB	=	Islamic Development Bank
KSA	=	Kingdom of Saudi Arabia
UAE	=	United Arab Emirates
BBMB	=	Bank Bumiputra Malaysia Berhad
BOCB	=	Bank of Commerce (Malaysia) Berhad
SAC	=	Shariah Advisory Council
IBS	=	Islamic Banks Scheme
CEO	=	Chief Executive Officer
ETP	=	Economic Transformation Programs
NKEAs	=	National Key Economic Areas
EPPs	=	Entry Point Projects
GNI	=	Gross National Income
I-facts	=	Islamic finance advisory and consultancy services
KXP	=	Lapangan Terbang Antarabangsa Kulim
SPIKE	=	Sungai Petani-Kedah Inner Expressway

OYA	=	Othman Yeop Abdullah
SPSS	=	Statistical Package for the Social Science
IV	=	Independent variable
DV	=	Dependent variables

CHAPTER 1

INTRODUCTION

1.1 Background of the study

In the 21st century, the globalizations has led financial institution to conduct a changes of their operation process. Most of the companies are trying to implement several approaches to sustain in the business marketplace and gain competitive advantage. To succeed in the global economy, most of organizations must have unique and distinctive structure and process which are fast and can deliver high quality, flexible as well as low cost. As a successful developing country, most of the financial institution in Malaysia are trying to improve performance in term of quality, cost, speed, profitability and organizational performance. Based on Khong and Richardson (2003), Bank Negara Malaysia (BNM) encourages banking sector in Malaysia to respond quickly in term of changes, and for other banking sector that fails to respond quickly will be giving penalties or advice from BNM. To be an effective financial institution, strong performances are important to sustain in the global market. Khong and Richardson (2003) also emphasized that banking industry is needed to improve the quality service, cost and speed to survival in the global market.

However, the performance is not solely focus on financial performance, but financial institutions also need to focus on customer and keep good relationship with other stakeholders. As a result, the performance should be focus on giving education and knowledge for individual as well as public interest in order to enhance customer relationship management.

According to Dasuki and Abdullah (2007), they argued that one of the Malaysian government aspirations is to have a strong Islamic banking. It is evidence that the government of Malaysia supports for Islamic banking performances enhancement and encourage adherence to Islamic compliance or Sharia in conducting routine financial activity. In 2020, BNM aims to achieve 40% of market share for total banking asset on local Islamic banking industry (The Star Online, 2014). Moreover, BNM also believes that the aspiration of Malaysian government will be reached. Referring to Datuk Abdul Halim Ismail, the former managing director (MD) of Bank Islam Malaysia Bhd. (BIMB) and the chairman of board of director for Syarikat Takaful Malaysia, the Islamic banking have a strong demand and positive momentum because its Islamic financial product and services obtained a positive feedback from non-Muslim customer. Then, he added that "Currently, big non-Muslim cities like London, New York, Singapore and Seoul are trying to become Islamic finance centers," at Global Islamic Finance Forum (GIFF) in 2014 (The Star Online, 2014). It shows that Malaysia as an Islamic country has big opportunities and aspiration to be the best Islamic banking in the world.

In order to improve the performance, Islamic banking industry need to establish an effective strategy to realize the aspiration. To realize the aspiration of Malaysia government to be an efficient and effective financial institution, the financial sectors are required to adopt the approaches from manufacturing industries. One of the best approaches that have been applied in manufacturing industries in order to improve performance is the implementation of Business Process Re-engineering (BPR). The primary goal of financial industry is to provide smooth and superb process and good customer service by reducing the cost, improve quality, promising customer satisfaction,

enhance speed and profit maximization (Ringim, Razalli, & Hasnan, 2011). Khong and Richardson (2003) also claim that if the banking parties are to improved banking performance, BPR are the best approach to be implemented. They also define that the organization performance will be improve by using BPR approach in terms of quality, efficiency, effectiveness, speed, productivity, customer service and profit maximization (Ozcelik, 2010; Ringim, Razalli, & Hasnan, 2011).

In fact, BPR concept was introduced by Michael Hammer on 1988s as an originator in this field. The concept of BPR is first proposed in a Harvard Business Review article and the title named ''Re-engineering Work: Don't Automate, Obliterate''. The re-engineering concept give meaningful knowledge to the respective readers in which can be acquired from book "Reengineering the Corporation" by Hammer and Champy, (1994). Before Hammer and Champy (1994) introduced the BPR concept, they have doing some observation to several successful organizations. From their observation, they provide the set of common tool and technique as BPR (p.5). Based on operational definition, BPR can be defined as "starting over" (p. 31). Hammer and Champy (1994) outlined that the BPR as a radical approach to gain significant improvement in measuring the performance such as speed, service, quality and cost (p. 32).

Nowadays, BPR became one of the popular approach in dealing business in today's rapid technological advancement, and any changes or transformation (Ranganathan & Dhaliwal, 2001) among organization because it helps to improve the performance of companies. Business processes can be more efficient, effective, and flexible, and the BPR projects can be used as strategic initiatives (Kamhawi, 2008). Al-Mashri and Zairi (2000) stated that BPR approach will create changes in process, people

and technology. Furthermore, re-engineering process is also make the original process becomes simple, faster and economic (Akamavi, 2005). He (2005) briefly explained that most of the company have implement BPR in order to bring innovation and improve their performance, so organizations can generate competitive advantage compared to other business rivals. BPR is a tool that can be applied to be successful in management (Terziovski Fitzpatrick & O'Neill, 2003). Nevertheless, Guo (2004) argued that re-engineering is not a solution or answer for everything, but only some outlines or guideline to solve the problems and issues.

In addition, due to globalization of the financial market, most companies tend to change their operational processes in order to compete in the local or global competition (Ringim, Razalli & Hasnan, 2012). BPR is needed to implement by the company to attain successful performance (Sidikat, & Ayanda, 2008). On the other hand, Sung and David (1998); Setegn Ensermu, and Moorthy (2013) also agreed that the BPR factor can affect the performance of companies. In new global challenges, BPR possess a strong benefit to the banking industries because it will provide assistance to the banking industries to increase the satisfaction of their clients (Salimifard, Abbaszadeh, & Ghorbanpur 2010). Hammer and Champy (1994) also emphasized that American manager and executive should use BPR in order to compete in new global world (p. 1) because due to the last clarification in their books, Americans have power on innovate, self-reliance, willing to any changes, taking risk, and have good attitude by applying BPR in the organization (p. 3). To be successful in implementing BPR, the important matters that need to be concerned is to fit the project with organizational culture and information technology (IT) (Al-Mashari & Zairi, 1999; Khong & Richardson, 2003; Ahmad, Francis, & Zairi, 2007).

However, BPR implementation is not always successful to be applied in organizations. Many organizations are already implementing BPR in their organization but many organizations have failed to implement this approach successfully. Many authors have reported that almost 50-70 percent of organizations are not capable to implement the BPR approach (Hammer & Champy, 1994; Al-Mashari, Irani, & Zairi, 2001). In fact, it is not easy to implement BPR in the organization because there are several matters that need to take into account because the implementation of BPR needs a proper planning and huge efforts from organizational members whether private or public organization (Ahmad, Francis & Zairi, 2007; Maleki & Beikkhakhian, 2011).

Pursuant to Mlay, Zlotnikova and Watundu, (2013), BPR is the vital component for organizational performance, but most of the organizations are not be able to implement it. Hammer and Champy (1994), indicates that only 11 cases out of total 20 cases, shows the 5 percent of performance improvement. Afterwards, Ringim, Razalli, and Hasnan (2011) mentioned that the level of execution of BPR approach in banking sector is still scared. From the researcher observation, there is almost no study that is related with the implementation of BPR on Islamic banking industry especially in Malaysia.

1.2 Problem Statement

The globalization and rapid technological advancement have significantly increased the level of competition on the financial service activity, hence most of the banking industry should strive to have a proper guideline and approach to go beyond the local competition. The globalization and liberalization have led the banking industry to face radical change in operations and services (Wei & Nair, 2006). In Malaysian banking perspective, banking industry has made a transformation in banking structure, process, and operation to achieve competitive advantage among the banking industry. According to Zainol, Shaari and Muhammad Ali (2008), Islamic banking are forces to changes their operation because of new technology and new customer generation. According to Ahmad and Abdul Rahman (2012), BNM recommended that the banking industry to merge with other banking sector to enhance operation scale and increase the number and value of Islamic banking. By doing merge, collaboration or acquisition with other banks, Islamic banking are drive to radical changes on their operation and service activity (Wei & Nair, 2006). After decades, the operation of Islamic banking also changing from traditional banking into the modern banking. It means that, every changes on their operation and service are led organization to reengineer their operations.

According to Al Nasser and Joriah (2013), Malaysia is targeted to be one of the biggest players in the Islamic banking, so, a government of Malaysia provides fully supports to these institutions in order to improve the performance of Islamic banking. In addition, BNM has also given emphasis approach to develop the Islamic banking industry (Wasiuzzaman & Gunasegavan, 2013). Based on Khong and Richardson (2003) study, BNM provides opportunities and full supports for the initiative of BPR implementation in

the Malaysian banking industry. In Malaysian banking perspective, the government already provides proper guideline in Shari'ah principle (Saiful Azhar & Mohd Afandi, 2003) and establishes many more Islamic banking (Al Nasser & Joriah, 2013) in this nation in which government encourages commercial and foreign banking to open Islamic investment in 1993. Since BPR are supported in Malaysia banking, so the study on relationship between BPR and Islamic banking performance is needs to be done and based on the observation from secondary data, the research about this topic has not been performed by any previous researcher.

There are experts and scholars that undergo the research in the area of banking industry such as Khong and Richardson (2003); Terziovskia, Fitzpatrick, and O'Neill (2003); Cheng and Chiu, (2008); Salimifard, Abbaszadeh, and Ghorbanpur (2010); Ringim, Razalli, and Hasnan (2012) but the literature regarding the relationship of BPR implementation with performance of banking industry is still fresh and lack of evidence, and the level of BPR implementation on banking sector is still scare (Ringim, Razalli, & Hasnan, 2011). Due to lack of literature on this topic, this matter has created difficulties for academicians and practitioners to gain success in implementing BPR on banking sector. Most of previous researchers are suggested to gain more literature about this topic, so researcher are decided to doing in this topic to gain more literature about BPR and banking performance.

Furthermore, based on previous research, most of the researchers are focus to examine the performance of banking industry in terms of financial and non-financial, cost reduction, service performance, operations efficiency, profitability and customer satisfaction. Nevertheless, because this study is more focusing to measure the implication

of BPR implementation on Islamic banking performance, thus, this study is applying the measurement of Islamic banking performance by using Maqasid al-Shari'ah Framework (Mohammed, Razak, & Taib, 2008). Based on Maqasid al-Shari'ah framework, the performance of Islamic banking is measured into three broad areas includes; (1) educating individual, (2) establish justice and (3) public interest. The major reason of why this study used this type or measurement because Al Nasser and Josh (2013) mentioned that Islamic principle further emphasizes the profit and loss sharing and it prohibitions the collection of interest.

Saiful Azhar and Mohd Afandi (2003) have explained the performance of Islamic banking in terms of scheme and operation are still at a lower than mainstream banks in terms of management efficiency. These matters occur due to the small market sizes, lack of experience and financial factor of Islamic banking industry compared to other conventional banking in Malaysia. However, during the past five years, the performance of Islamic banking industries is growing rapidly from year to year (Al Nasser & Joriah 2013). The development of Islamic banking in terms of total income indicates that RM9.71 billion in 2009 increase to RM11.80 billion in 2010, and based on net income of Islamic banking, the figure in 2009 has increased from RM6.1 billion to RM6.84 billion in 2010 (Wasiuzzaman & Gunasegavann, 2013). According to RAM Rating Services Bhd. (RAM Ratings), Islamic banking industry has successful to double their assets in the last five years (The Star, 2014). The total increase was around RM423 billion at the end on February 2014 and it is demonstrates that Islamic banking industry had 21% of total banking assets in Malaysia (The Star, 2014). In 2017, RAM rating is expected that Islamic banking sector will gain 25% shares of total assets of the Malaysian banking sector. In

2020, BNM is targeting to attain 40% of market share from the total banking assets of the local Islamic banking industry (The Star, 2014). Is it true that the improvement of Islamic banking performance is due to BPR implementation approach? This matter is important and need to be investigated whether the BPR implementation have an ability to affect Islamic banking performance or not.

Based on the finding of previous researchers, customer focus is one factor as a key to drive changes (Cheng & Chiu, 2008), transform the organization (Hammer & Champy, 1993) and gain brilliant performance (Wei & Nair 2006). In term of IT infrastructure, Cheng and Chiu (2008) explain that, the organization performance still can be gained without involving technology. It is true, the Successful implementation of BPR is depends on BPR project itself (Al-Mashari & Zairi, 2000). Furthermore, Guimaraes and Bond, (1996) emphasize, effective in management commitment toward the management teams of bank will influence the performance of banks. While, Cheng and Chiu (2008); Storey and Westhead (1994), found on study, there are no relationship between changes in management and organizational performance. The finding from the previous researchers is a gap for further investigation on the relationship BPR and banks performance.

Last but not least, the different opinion and findings between many scholars is also creating a huge gap in this study. From the previous studies, some scholars have claimed that BPR is able improve the organizational performance (Khong & Richardson, 2003; He, 2005; Ahmad, Francis, & Zairi, 2007; Kamhawi, 2008; Cheng & Chiu, 2008; and Ringim, Razalli, & Hasnan 2011). While other scholars explain that BPR is not often assisting organization to improve the performance. Many authors have reported that almost 50 until 70 percent failed to implement this approach (Hammer & Champy, 1994;

Al-Mashari, 2001). According to Abdolvand, Albadvi and Ferdowsi (2008), based on their study on two companies in Iran, the companies failed to implement BPR because of some factors, difficulties and complexity. Hammer and Champy (1994) also indicates that only 11 cases out of total 20 cases, shows the 5 percent of performance improvement. The differences in opinion and inconsistent result between two groups of scholars become a major discussion in this study in order to understand whether BPR implementation provides benefits to gain success or failure in terms of organizational performance.

1.3 Research Questions

Based on problem statement above, this study is trying to find the answer for the questions as filling:

1. To what extent does the BPR factors (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) are able to influence the overall performance of Islamic banking branches in Kedah?

2. To what extent does the BPR factors (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) are able to influence the performance of Islamic banking branches in terms of educating individual?

3. To what extent does the BPR factors (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) are able to influence performance of Islamic banking branches in terms of establishing justice?

4. To what extent does the BPR factors (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) are able to influence the performance of Islamic banking branches in terms of public interest?

1.4 Research Objectives

1. To examine the BPR factor (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) and the overall performance of Islamic banking branches in Kedah.

2. To examine the BPR factor (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) and the performance of Islamic banking branches in terms of educating individual.

3. To examine the BPR factor (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) and the performance of Islamic banking branches in terms of establishing justice.

4. To examine the BPR factor (strategic alignment, management commitment, change management, customer focus, BPR project management, IT infrastructure) and the performance of Islamic banking branches in terms of public interest

1.5 Significance of the Study

The significant of this study can be divided into two categories named academic interest and practical interest.

1.5.1 Academic interest

The study is essential to understand relationship between BPR factor and performance of Islamic banking. This study has been done by the researcher to investigate the relationship of BPR implementation with Islamic banking performance. The previous research investigates the relationship between BPR factors and bank performance which is focusing on financial and non-financial aspect (Terziovski Fitzpatrick, & O'Neill, 2003; Khong & Richardson, 2003; Sidikat & Ayanda, 2008; Cheng & Chiu, 2008; Ringim, Razalli, & Hasnan, 2011). While on this study, the research is anticipated to give credit and value to the academic scholars in order to understand BPR implementation in which performance is based on Maqasid al-Shari'ah Framework as major measurement instrument. This application can enhance value-added to academicians due to the new measurement of performance which based on Islamic principle. Furthermore, this study is also facilitates the academician to find the sources of literature about the linked between BPR and performance of Islamic banking. Thus, this study will develop a new literature and knowledge in term of operation management in Islamic financial institution in developing countries like Malaysia.

1.5.2 Practical interest

In term of practical interest, this study provides the empirical evidence about relationship of BPR implementation on Islamic banking in Malaysia. The study is expected to give

values and benefits to the Malaysian government, business practitioners, and manager of organization to increase their knowledge and apply this study to focus and implement BPR. In the future, this study is important be used as a sample as a successful benchmark to implement BPR on organization especially in Islamic banking institution. To understand the factor of successful BPR implementation, organization is required to understand the concept and take an action to improve the performance and achieve the organizational objectives. That is the reason of why this study is very significant to the organization, employees, individuals, suppliers and other stakeholders about the effect of BPR implementation on Islamic bank performance.

1.6 Research Scope

The scope of this study is focusing to investigate the implementation of BPR on performance of Islamic banking in Malaysia. The study is the relationship between Business Process Re-Engineering (BPR) implementation on Islamic banking performance and focusing on Islamic Banking branches in Kedah. The independent variable in this study includes (1) strategic alignment, (2) management commitment, (3) change management, (4) customer focus, (5) BPR project management, and (6) IT infrastructure. The independent variable is adapted from Cheng and Chiu (2008). Then, the dependent variable for this study is performance of Islamic banking branches. The dependent variable is based on Maqasid al-Shari'ah Framework, such as (1) educating individual; (2) establish justice, and (3) public interest and adapted from Mohammed, Razak, and Taib (2008).

The sample of the study is limited to top management and executive level in which represent their organization to answer all relevant questions of measurement. It is because the top management and executive level is often describes as having a vision and alert with overall performance as well as business operation.

The table 1.1 below shows the total banking sector that applies Islamic financial system in Malaysia. Malaysia has 16 banks that apply Islamic principle and Kedah only have 14 banks that apply Islamic banking. This is the combination of local bank and foreign bank which applied Islamic principle in their operation. For the sake of this study, this study is only focusing on full-fledged Islamic banking and Islamic window of conventional bank without involved Islamic finance companies.

Table 1.1
List of licensed Islamic bank in Malaysia

NO.	BANKS	NO.	BANKS
1	Affin Islamic Bank Berhad	9	HSBC Amanah Malaysia Berhad,
2	Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	10	Hong Leong Islamic Bank Berhad,
3	Alliance Islamic Bank Berhad	11	Kuwait Finance House (Malaysia) Berhad,
4	AmIslamic Bank Berhad	12	Maybank Islamic Berhad,
5	Asian Finance Bank Berhad	13	OCBC Al-Amin Bank Berhad,
6	Bank Islam Malaysia Berhad	14	Public Islamic Bank Berhad,
7	Bank Muamalat Malaysia Berhad	15	RHB Islamic Bank Berhad,
8	CIMB Islamic Bank Berhad	16	Standard Chartered Saadiq Berhad.

Source: Bank Negara Malaysia

1.7 Definition of Key Terms

There are two major variables that involved in this study: BPR factor and Islamic bank performance. The discussion about the variable are discussed in table 1.2:

Table 1.2
Definition of variables

Variable	Definition
Business process re-engineering (BPR)	BPR is defining as a 'radical approach to gain significant improvement in measuring the performance such as speed, service, quality and cost'.

Strategic alignment	Strategic alignment defines as the extent of the strategy will support the goal, objective, actions, milestone, budget and plan of the organization.
Management commitment	Management commitment is define as commitment from all employees in organization especially top management to work as a teamwork and play a role and responsibility to achieve the long and short term and objective.
Change management	Change management is all human, culture adjustment technique and social related that needed for management. This is use to redesign the process and structure of system with effectively.
Customer focus	Customer focus is more related to organization focus on customer demand. This is related to value satisfaction, requirement and the benchmarking to gain competitive advantage.
BPR project management	Project management is something that alignment with corporate strategy. This is about alignment with technique and value from the Islamic bank performance.
IT infrastructure	IT infrastructure define the expenditure from organization to develop IT infrastructure like IT training, consultant, computer, software, and increase the infrastructure of IT in organization.
Islamic Banking performance.	Organization performances are referring to the level of bank performance based on Maqasid al-Shari'ah Framework (educating individual, establish justice and public interest). This is more about the performance of organization is good or not good.
Educating individual	Educating individual is dimension about advancement knowledge, instilling a new skills and improvements and creates awareness of Islamic banking.
Establishing justice	Establishing justice is dimensions about fair returns, elimination of negative elements that cause injustices and not reasonable price for products and services.
Public Interest	Promoting welfare or public interest is dimension about profitability of bank, redistribution of income and wealth and investment in vital economic sectors

1.8 Outline of Study

This research presented in five chapters. Chapter one is introduces background of this study. In chapter one has background of study, problem statement, research question, research objective, significant of study, scope of study, definition of key term and the lastly is outline of study.

Chapter two have discussed about the literature review are related in this study. There are two major variables: Islamic bank performance and BPR factor success and failure. In this chapter also discuss about the previous research about this study. The researcher are highlighted the definition and the explanations about success and failure factor when implement BPR. This chapter also discuss about the theory that have chosen and suitable to use in this study. For this study, resource-based view (RBV) theory used as a guideline to explain about relation of variable.

Chapter three are discuss about the research methodology. In this chapter the researcher are explain about theoretical framework, research hypothesis, research design, operational definition, research sample and population, instrumentation method, measurement of variables, data collection method and procedure, pilot test, reliability test, and data analysis technique.

In Chapter 4, the findings of the study and data analysis are discussed. This chapter are explain and present the complete results. Data was analyze in form of text, figure and tables. Then, these chapters also discussed about the total result and the explanation are done by researcher properly.

Finally, in Chapter 5, researcher focus on the conclusion and recommendations for this study. The researcher would provide the implications of this study into two dimensions which including managerial, academician and practical implication. Furthermore, the researcher also will provide a limitation of the research and giving recommendation and suggestion for the future research. The conclusions of the study are based on analysis results.

CHAPTER 2

LITERATURE REVIEW

2.1   Introduction

The purpose of this research is to provide literature in order to construct study properly in the future. The major focus of this research is focuses on the relationship between Business Process Re-Engineering (BPR) on performance of Islamic banking branches in Kedah. Previous studies on the performance of the organization have been selected to complement this chapter. As such, the performance measurement for Islamic bank performance needs to develop significantly to ensure all the measurement can be understood by various parties.

In this section, the researcher will explain about performance of Islamic banking in Malaysia in details. The next section clarify about the BPR success factor and failure factor. All relevant evidences will be highlighted in this section about the relationship between BPR and organizations performance. The relationship between BPR and the performance of Islamic banking is based on Resource-Based View (RBV) theory and the researcher is also describes the relevant reason of why RBV has been chosen as an underpinning theory for this study.

2.2 Organizational Performance

Nowadays, globalization makes financial market need to execute a transformation if the organization still wants to enhance competitive advantage. Most of the profitable organization produces product and service in order to gain a profit. The performance of the organization is often measures based on their actual output compare to input. The measurement of organization performance is need for organization to focus in the area or subject that essentially need for improvement. The efficiency and effectiveness factor in the organization provides a benefit to the firm and resulting in good performance.

Organizational effectiveness defines as an achievement of organization in term of goals and demand or feedback from customer. Meanwhile, efficiency is important of how organization manage their resource to produce output and deliver the output to the customer. In other words, effectiveness is focuses on customer and efficiency is focuses on internal process and operation. Based on previous research, organizational performance is evaluates based on both criteria either financial or non-financial measurements (Bontis 1998; Ringim, Razalli & Hasnan, 2012). Financial performance includes return on investment (ROI), earnings per share (EPS), return on equity (ROE), rate of return, profit and cost. While non-financial are market share, customer satisfaction, innovation and learning, quality, responsiveness, service and product delivery, and the flexibility (Bontis 1998; Ringim, Razalli & Hasnan, 2012).

Ray, Barney and Muhanna (2004) emphasize that organization performance have high aggregate concept and several business process that contributing to overall performance in organization. They are also suggested the performance measurement need

to measure at both process and every level of activity. Furthermore, Setegn, Ensermu, and Moorthy (2013) also stressed that the performances of organization is going to decrease when the organizations are not able to deliver the result, not capable to cope and solve anything happened and not efficient and effective in decision-making process. Organization need to improve certain activity to ensure that they are still competitive in market. Hanafizadeh and Osouli (2011) indicate that organization should redesign the process and operation to measure the performance of organization in order to achieve performance and organization goal. The performance measurement is vital for company especially banking industry to be more effective and efficient in managing organization and customer. By giving the right focus in operational activity and decision-making process, it will assist an organization especially Islamic banking to solve the problem effectively and efficiently.

2.3   Bank Performance

As a profitable organization, performance of banking sector has no differences with other companies. The performance is based on efficiency and effectiveness of organization to manage the organization properly. According to Ringim, Razalli and Hasnan (2012) they explained that the assessment of bank performance is an important thing for bankers, regulators and customers. In this turbulent financial environment, banks provided the significant information for investors and depositors of banking performance and future plans. The information that has been provided to clients is to give clear information and current position of bank performance in order to boost investors' confidence to involve

with the organization. Managers are constantly faced with the challenge of improving the activity of deposits or loans to increase profits and organizational performance. Most of the bank usually hopes that they are able to reach high level of performance from time to time. The primary performance goals and target of financial service industry are always improve their customer service, reduction of the company costs and expenses, improve the service quality, improve speed and accuracy, and provides good services to their customer and gain maximum company profit (Ringim, Razalli & Hasnan, 2011). Organization should be efficient in process or activity, and have a good connection with their customer in order to sustain competitive advantage in market because competitive advantage is important for organization in positioning their brand and image in marketplace.

In fact, banks can provide the several ranges of products and services to customers in order to improve the performance of the banking industries and continues to be successful in the marketplace (Ringim, Razalli & Hasnan, 2012). Dusuki and Abdullah (2007) describes that Islamic banking should to improve the performance on quality service customers to satisfy the customer. By improving the service to the customer, it will enhance the customer confidence to select Islamic banking products and services as their first choice. The performance of organizational process should be efficient and more concerned with customer needs. The experiment has been conducted to transfer approaches such as re-engineering process to improve performance which encourages efficient and effective process. For instance, the performance improvement by using re-engineering which is mostly applied by manufacturing industries could be used as a guideline to improve banking industries by using the same approach.

2.3.1 History of Islamic Banking

Islamic banking is a financial activity that consists with Shariah compliant or Islamic law which is based on Al-Quran and Sunnah of Prophet Muhammad p.b.u.h. Islamic banking system encourage and teach Muslim community to follow the right guidelines for financial activity using the Islamic or Shariah compliant. In recent decades, Islamic banking became an important part in world financial industry and captured the hearts of the customers include non-Muslim customers. Islamic banking industry has three main types of players such as full-fledged Islamic banking, Islamic window of conventional bank and Islamic finance companies (AT Kearney analysis, 2012). Munawar and Molyneux (2006) explicate that Islamic banking is something unheard before and it known as "wishful thinking" in thirty years ago. However, in the 1970s, the term of Islamic banking has begun discussed after the "First International Conference on Islamic Economics" which was organized by King Abdul Aziz at University in Makkah. After that, the formation of first commercial Islamic Bank that known as "Dubai Islamic Bank (DIB)" in United Arab Emirates has been established. Then, the next plan is the development of International Islamic Development Bank (IDB) in Jeddah, and many private commercial Islamic banks have develop in Egypt, Kuwait, Bahrain, Sudan, and other countries.

In Malaysia, Bank Negara Malaysia (BNM) emphasize that the phenomena of Islamic banking is not something new because more than 1,400 years ago, all the principle and philosophies have been outlined in Holy Qur'an and the Sunnah of Prophet Muhammad p.b.u.h. Basically, the emergence of Islamic banking is often associated with the rise of Islam and the desire of Muslims to live in the aspects of life based on the Islamic

compliant and Shariah law. Islamic banking is a banking system that have implemented using principles of Islamic law or Shariah and based on Islamic economics (Al-Nasser & Joriah, 2013). Hence, the Muslim people have realized the importance of using Islamic compliant in financial activity and tempted to implement and embrace Islamic banking in their daily life.

According to Munawar and Molyneux (2006), the Islamic banking has double digit average in annual rate of growth after the development of many Islamic banking institutions in the world. At the moment, Islamic banking industry is growing fast. For example, in 1975, Islamic banking only have few hundred dollars of banking sizes, nevertheless this size have growing faster and it have reach hundred billion of dollar on 2005. The growth of Islamic banking has increased over the five years. The implementation of Islamic principle in banking industry is not limited to only Muslim country but it has spread from east to west and all the way like from Malaysia and Indonesia to Americas and Europe countries (Munawar & Molyneux, 2006). Furthermore, conventional bank and multinational bank also have trail to implement Islamic banking system. The growths have been faster and the number of Islamic banking is around 280 Islamic banks institution in 48 countries and conventional banking also have started to produce Islamic product. The major Islamic banking in the world is Iran, Kingdom of Saudi Arabia (KSA), United Arab Emirates (UAE), Malaysia, Kuwait, Qatar and Turkey (AT Kearney analysis, 2012).

The development of Islamic banking institution in Malaysia was caused by both factors, internal and external factor (BNM, 2007). The internal factor can be argued in which Muslim people forcing the government to develop of Islamic banking after the

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establishment of "Lembaga Tabung Haji" in 1963. Muslim society requires Islamic banking because of the performance of Tabung Haji that has been increased from year to year. In a meanwhile, the establishment of Islamic banking in Middle East in mid-1970s and development of "Islamic Development Bank" in Saudi Arabia became the external factor which provides a major influence to the Islamic banking in Malaysia. Due to this reason, Al-Nasser and Joriah (2013) argued that Malaysia have started to implement Islamic banking in the year of 1963 and on July 1983. In this case, Malaysia has established "Bank Islam Malaysia Berhad (BIMB)" as the first step to establish Islamic financial institutions. The merger between Bank Bumiputra Malaysia Berhad (BBMB) and Bank of Commerce (Malaysia) Berhad (BOCB) has lead Malaysia to establish the second Islamic banking known as Bank Muamalat Malaysia Berhad (BMMB) on October 1999. The development of two full-fledge Islamic banking system encourages other banks to implement Islamic banking as core products and services.

BNM also has encouraged all banking institution to produce Islamic products and services by using the existing branches. On March 1993, BNM was also introduced a new scheme known as "Skim Perbankan Islam" (Islamic Banking Scheme). The development of Islamic banking in Malaysia is increase significantly and currently, Islamic banking have more than 100 products and services such as Mudharabah, Murabahah, Musyarakah, Ijarah, Qard, Bai' Bithaman Ajil, Ijarah Thumma Bai', Istishna' and so on. Furthermore, BNM is also creating "Islamic Interbank Money Market (IIMM)" as a short-term intermediary financial between banks on 4 January 1994. IIMM was establishing to make it easy on financial transaction activity between surplus banks to deficit bank. In the future, this situation will improve performance between banking and customer service. On May

1997, BNM was established the Shariah Advisory Council (SAC) to advice banking institution on all Shariah matters. This situation has encouraged financial institution to implement Islamic banking systems. Today, under the Islamic Banking Act 1983, Malaysia already has eleven Islamic banks and there were eight IBS banks that offering products and services based on Islamic principle (BNM, 2007). All of the activity of Islamic banking is based on Shariah principle. Islamic banks scheme (IBS) have divided to three categories. First is commercial banks which manage about cooperate finance and trade, second is finance companies which handle about home mortgage and automobile financing, and the last is merchant banks which manage about bond issue and new stocks (Saiful Azhar & Mohd Afandi, 2003).

According to Abd Rani Lebai Jaafar who is Chief Executive Officer (CEO) and General Managers of RHB Islamic bank, Malaysia government targeted to giving full attention about the development of Islamic banking in Malaysia (Utusan Malaysia Online, 2012). He outlines in Utusan Malaysia online that, under the Economic Transformation Programs (ETP), the government of Malaysia was predicting that the Islamic banking sectors will achieved more than 40% growth toward 2020. The Economic Transformation Programme is Malaysian roadmap to be a high-income nation that is both inclusive and sustainable. Based on the ETP's roadmap, financial service is one of the largest National Key Economic Areas (NKEAs) after Oil, Gas & Energy, Palm Oil and Wholesale & Retail (Economic Transformation Programme, 2010). Under the ETP prospect, Malaysia government aims to serve the needs and wants from customer, and raise the global market share in market niches. Moreover, under the six of Entry Point Projects (EPPs), Malaysia will be developed as a global Islamic finance hub by providing high-value Islamic finance

advisory and consultancy services (I-facts) in order to deliver incremental RM36.5 billion Gross National Income (GNI). Lastly, under the ETP prospect, Islamic banking sector will strongly grow 15% annually from 2010 to 2015 and 12% growth from 2016 until 2020 (Economic Transformation Programme, 2010). For this reason, RHB Islamic obviously will strive to achieve that objectives and reach this opportunity to be one of the best of Islamic banking organization (Utusan Malaysia Online, 2012).

In regard with this matter, the developments of Islamic banking in Kedah currently are being concerned by Kedah governance. Currently, Kedah has several full-fledged Islamic banking systems whether it is local and foreign banking institution (table 2.1). The rest of the other banks such as Maybank Berhad and CIMB Bank Berhad is being conducted using dual-system under the same entity. The huge amounts of Islamic banking branches in Kedah is proves that the Islamic banking has been accepted and adopted by Malaysians either Muslims or non-Muslims in Kedah.

Table 2.1:
List Islamic full-pledged in Kedah

Local	Foreign
Bank Islam Malaysia Berhad *(all branch)*	OCBC Al-Amin *(Sungai Petani)*
Bank Muamalat *(all branch)*	Al Rajhi Banking & Investment Corporation (Malaysia) Berhad *(Sungai Petani)*
Affin Islamic *(Jitra)*	
AmIslamic (M) Sdn. Bhd. *(Alor Setar)*	HSBC Amanah Malaysia Berhad *(Alor Setar & Sungai Petani)*
Hong Leong Islamic Bank Berhad *(Alor Setar)*	
RHB Islamic Bank Berhad *(Sungai Petani)*	
Public Islamic Bank Berhad *(Alor Setar)*	

2.3.2 Performance of Islamic Banks in Malaysian

The long term objectives of BNM are very progressive, comprehensive, effective and efficient in managing Islamic banking system in Malaysia. BNM have three vital matters to be focused including the increase number of global player or investors, variety of instruments and comprehensive financial infrastructure (BNM, 2007). Furthermore, Islamic banking system also reflects on socio-economic justice, education to individual, legislation and rules, political interest, technological application, and environmental which is in line with the Islamic principles. All of the activity, process and procedures, and products and services of Islamic banking systems is in parallel with the Shariah compliant and use the right ways to execute it.

Islamic bank has achieved remarkable growth over the years. According to Al-Nasser and Joriah (2013), the reason of why many organizations and Muslim people express their desire towards Malaysia government in order to establish Islamic institution because "Tabung Haji" has outstanding performance. Since the increase demand from Malaysian Muslims community to develop the full-fledge Islamic banking systems, most of banking institution currently has tried to implement Islamic banking system. Saiful Azhar and Mohd Effendi (2003) expose that the beginning of development of Islamic banking shows that the performance of Islamic banking is still at low level compared to conventional banking, but lately, Islamic banking have more than 30 percent in market share after Malaysian government encourages banking institution to enter bond market or Sukuk in Islamic financial system. In Islamic financial system, the role of bond is replaced by Sukuk. Al-Nasser and Joriah (2013) also supports that performance of Islamic banking increase rapidly (Parker, 2011; The Star, 2014; Wasiuzzaman & Gunasegavann, 2013). In

2020, BNM is targeting to attain 40% of market share from the total banking assets of local Islamic banking industry (The Star, 2014). It is clearly shows that Islamic banking in Malaysia has huge opportunities and capability to be successful industry from day to day.

Suraya and Abdul Rahim (2012) emphasized that Islamic banking nowadays are more involving and participating in tough competition in global financial market. According to "ATKarney analysis", there are four main challenges facing by Islamic banking in the future includes (1) size, (2) competition, (3) standardized and regulation and (4) cost structure. In term of size, the Islamic banking is considering smaller than conventional banking and there is no Islamic banking institution become a leader in global banking industries. The competition among banking institution also has increase because the other conventional banks currently are also capable to launch Islamic windows and operates with the same entity even though using conventional and Islamic compliant at the same time. Afterwards, the different understanding and opinion about Shariah compliant also make it as a challenge in Islamic banking. Lack of standardized and regulation make it difficult to successfully implement Islamic principle. Lastly, the rising cost of structures, and products and services introduction at the marketplace become a major challenges to apply Islamic banking. This is because Islamic product and services is very complex in terms of structure and a lot of efforts need to be done to promote the details and descriptions of the products and services structure compared to conventional product. Thus, it is require high cost to restructure and positioning Islamic product and service. Therefore, the re-engineering activity in certain aspect in improving Islamic banking performance should be done due to increase demand from customer.

2.3.3   Previous Studies on Bank Performance

Most of the organizational performance studies are only focusing on manufacturing industries. Organizational performance can be linked between organization learning, human-resource, market orientation, quality improvement or any other component in banking industry. The research about an effect on bank performance is something new and it not very familiar among researcher in academic field (Cheng & Chiu, 2008; Ringim, Razalli & Hasnan, 2011).

Generally, banking performance can be evaluated through any types of measurement and basically, the performance measurement is relevant to financial and non-financial aspect. Khong and Richardson (2003) measure the performance of banking sectors by using business performance, customer service management (Wei & Nair 2006; Buavaraporn & Tannock, 2013) operation efficient, and cost reduction (Ringim, Razalli & Hasnan, 2012). In market globalization, banking industry should focus to meet customer demand. The demand from customer is always changing and has its own market trends. Thus, banking industry should have proper strategy to attract the banking customers. On the other hand, Akamavi (2005) measures banking performance based on the level of innovation. Innovation is something important to organization especially banking industry to sustain in globalization. Cheng and Chiu, (2008) doing studies on banking industry in Hong Kong and this study measures performance based on profitability and customer satisfaction. It is similar to other studies in service sector, and organization needs to alert and concern with the changes from customer demand and expectation. Service sector should have a good leadership practice and customer focus approach to increase the performance of organization.

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2.3.4 Organizational performance measurement

The measurement of organizational performance is very important to ensure the survival of organization. There are several types of measurement to measure performance of banking industry including using quantitative, objective or subjective and either financial or non-financial measurement (Nura & Osman, 2012). The majority of previous studies are more focusing on measure performance based on financial and non-financial criteria. Nevertheless, the performance measurement is different among the organization due to types of organization, objective and situation of the organization. It means that the performance measurement is depends on main objectives and goals of the organization in which has been developed by the firm's top management.

According to previous studies, the main agenda of Islamic banking industry is not only to achieve high profitability, but it is most concern to avoid the community especially Muslim to involve with the banking transaction in which the prohibited elements in Islam such as interest, uncertainty and gambling are exist and ensure the banking transaction is Shariah compliance. And this matter is totally different with conventional banking industry which is more concerned with profitability as the main objective. Referring to Dusuki (2005), Islamic banking system is trying to create fairness in society, entrepreneur friendly, community oriented, and cooperation in financial activity, profit sharing and increase growth in real economic. Mohammed, Razak, and Taib, (2008) emphasize in their study that the objective of Islamic banking is based on Maqasid al-shariah framework. Several studies have been done to find the objective of Islamic banking based on Maqasid al-shariah. Based on the research, Al-Raysuni (1992), claims that Maqasid al-shariah is being developed by Muslim scholars in third century, after Hijrah, 9th Century

A.D. This is clearly shows that the main goal of Islamic banking differs from conventional banking.

Furthermore, Mohammed, Razak, and Taib (2008) was also clarify that Ibn Ashur (1998, p.190) on their book mentioned that, almost all of the scholars explicate the objective of al-Shariah to promote welfare and avoid vices. However, some of other scholar has a different understanding. According to Mohammed, Razak, and Taib (2008), Ibn Ashur clarify the objective of Shariah is to promote welfare, prevent corruption, maintaining stability, establish justice and develop harmony life. Meanwhile, Ilal al-Fasi argued that objective of Shariah is giving benefit to all, renewal human mind, use natural resource, maintaining order, land development and develop justice to all people. Then, Abu Zahra (1997) has classified the objective of Shariah in details into three areas such as (1) Tahdhib al-Fard (Educating the individual), (2) Iqamah al-`Adl (Establishing justice) and (3) Jalb al-Maslahah (Promoting Welfare) (Mohammed, Razak, and Taib, 2008).

   (1) **Tahdhib al-Fard** (Educating the individual)
Educating individual is divided into three dimension includes advancement knowledge (education grant or scholarship and research funding), instilling a new skills and improvements (training) and create awareness of Islamic banking (publicity).

   (2) **Iqamah al-`Adl** (Establishing justice)
Establishing justice is divided into three dimensions such as fair returns (profit equalization reserves and net investment income), elimination of negative elements that cause injustices (interest free product) and not reasonable price for products and services (total investment in mudarabah and musharakah).

(3) **Jalb al-Maslahah** (Promoting Welfare or public interest)

Promoting welfare is also divided into three dimensions includes profitability of bank (net income and total assets), redistribution of income and wealth (zakkah and net income) and investment in vital economic sectors (investment in real sector and investment in services).

2.3.5 Suitability of reengineering as radical performance improvement method

Business process re-engineering (BPR) is currently becomes a part of business improvement approach. Business process improvement (BPI) is something that can be used in unpredictable business environment, unstable politic, organizational changing and other factor that force organization to restructure their business process and operation. BPR and BPI are focusing on long run activity (Shin & Jemella, 2002). Although as a reported on literature, 50 to 70 percent of BPR approaches fail to achieve the performance objective (Hammer & Champy, 1994; Al-Mashari, 2001), there are the reason of why organization fail to successfully implemented BPR. The reason of failure includes lack of focus on the right issue, lack of delivery of right information about BPR, lack of management commitment and other reason.

Moreover, BPR is very suitable to be a performance improvement method because it gives benefit to the manufacturing and service firms (Shin & Jemella, 2002). BPR approaches give positive outcome like reduce cost, increase speed, reduce time of operation, increase productivity, improve quality, increase customer satisfaction, increase profit, decrease cycle time and respond quickly on customer feedback. Furthermore, from the empirical study, it clearly shows that BPR will improve organization performance

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drastically which is aligned with business strategy, effective in communication and use information technology in managing organization. Additionally, BPR is also suitable to be implemented in Islamic banking system as a performance improvement method.

2.4 Review of BPR Factors

Globalization and requirement from customer has led financial institutions in Malaysia either conventional banking or Islamic banking to improve their capability to adopt reengineering and engage in doing in-process change and bring an efficient and effective performance to meet requirement from the customer. According to banking institutions in Malaysia (BNM) license, Malaysia has around 27 commercial banking institutions on 12 November 2013 and 16 Islamic banking institutions on 12 November 2009. In early of 1990, some of the practitioners have developed Business Process Re-engineering (BPR) approach (Setegn, Ensermu, & Moorthy, 2013). In addition, BPR is become popular approach in managing an organizational changes from traditional or old process to the new approach by applied IT and system. Maleki and Beikkhakhian (2011) also demonstrated that BPR is the popular approach in organization because it able to handle a cycle of rapid technologies, business activity and assist company to optimize the profit and productivity (Habib, 2013). Furthermore, BPR is also expected to manage the new way of managing people, organization and process to achieve incredible result and help banks performance. According to Kuwaiti and Kay (2000), and Hammer (1990, p.32) defines re-engineering as "fundamental rethinking and radical redesign of business

processes to achieve a dramatic improvement in a critical quantum leap of contemporary measures of performance, such as cost, quality, service, and speed".

Based on the definition above, there are four keyword including radical, fundamental, processes and dramatic. BPR is strongly related with strategy and mission of organization. BPR is also become an important factor to be successful in performance improvement because by understanding the BPR, the companies are able to achieve competitive advantage, improvement in speed, reduce cost, increase level of productivity, and gain profitability (Hammer & Champy, 1993; Ringim, Razalli & Hasnan, 2011; Ringim, Razalli & Hasnan 2012). Basically, BPR is seeking to isolate between old approaches to the new approach. BPR is a management technique that radically rethinking, and redesign business processes to achieve dramatic improvements in business performance such as customer service management, decrease cost, increase service quality, speed, and reduce delivery time. Hanafizadeh and Osouli (2011) claims that most of the researcher agreed that the process re-engineering is the best approach for continuous improvement in evaluating demand from customer, market, and being the best tools to reach competitive advantage.

The main goal of the BPR implementation in the organization is to transform and improve business practices and processes to achieve dramatic improvements in organizational performance (Sidikat, & Ayanda, 2008). Ringim, Razalli, and Hasnan (2011), indicates in their study that manager in Nigerian banking recognized BPR as a tool to improve competitive advantage but most of the banks' manager are still lack of understanding about BPR approach. BPR is an approach that helping organization to develop and renovate old strategy to be a new strategy and it is certainly for organization

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to gain new approaches in order to sustain in the marketplace. According Ringim, Razalli and Hasnan (2012), business process re-engineering is the concept of management activities in which strive to bring new changes to the bank's performance. Setegn, Ensermu, and Moorthy, (2013) explain, if the BPR implementation gain success in organization, it will provide biggest benefits and boost the organization performance. Devaraj and Kohli, (2000) mentioned that there is an effect between implementation of BPR with performance in previous literature; hence, the researchers in academic field are responsible to examine the critical success factors (CSFs) or failure factors of BPR with organization performance.

Previous literature shows, there are two opinion of scholar that discuss about BPR approaches (Herzog, Polajnar, & Tonchia, 2007). The first scholar has claimed that BPR is able improve the organizational performance (He, 2005; Khong & Richardson, 2003; Ahmad, Francis, & Zairi, 2007; Cheng & Chiu, 2008; Ringim, Razalli, & Hasnan, 2011), while the second scholar have different assumptions about BPR and organization performance (Hammer & Champy, 1994; Abdolvand, Albadvi and Ferdowsi 2008; and Al-Mashari, Irani & Zairi, 2001). Many authors have reported that almost 50 until 70 percent is fail to implement this approach (Hammer & Champy, 1994; Al-Mashari, Irani & Zairi, 2001). According to Abdolvand, Albadvi and Ferdowsi (2008) based on their study on two companies in Iran; the companies fail to implement BPR because of some factors such as difficulties and complexity. Most of the studies are focusing on manufacturing industry and only a few of study are being conducted in banking sectors. In some circumstances, the researcher can conclude that there are almost no studies about BPR and Islamic banking performance that have been done before.

According to Al-Mashari and Zairi (1999), BPR factors can be classified into five factors such as change management, management competences, organizational structure, project management, information technology (IT) infrastructure. BPR is also can be measured in five aspects such as strategic approach, creating business process architecture, performance measurement, role of IT and human, and organizational factors (Herzog, Polajnar, & Tonchia, 2007). Ahmad Francis and Zairi (2007), found that seven BPR factor that have been implemented in higher educational which includes teamwork, quality management system, quality culture, change management, rewards, participatory management, less adequate financial resources and bureaucratic. Pursuant to Ringim, Razalli, and Hasnan (2012), they are using eight factors like change management, top management commitment, BPR project management, customer focus, process redesign, I.T infrastructure, financial resources, and less bureaucratic structure as the measurement factor. On the other hand, BPR also can be measure based on nine factor namely egalitarian culture, customer involvement, use of information technology, change management, top management commitment, project management, less bureaucratic structure, quality management system and adequate financial resources (Salimifard, Abbaszadeh & Ghorbanpur 2010). Moreover, Khong and Richardson (2003) is also applying change management, management competence, BPR project management, organizational structure, and IT infrastructure as a measurement of BPR factor on Malaysian banks and finance institutions. In addition, Cheng and Chiu (2008) also indicated six critical success factors for BPR approach in Hong Kong banking institutions such as strategic alignment, change management, management commitment, BPR project management, use of IT and customer focus.

Therefore, the present study will adapt with Islamic banking industry based on previous studies from previous scholars (Al-Mashari & Zairi, 1999; Khong & Richardson 2003; Ahmad Francis & Zairi, 2007; Cheng & Chiu, 2008; Salimifard, Abbaszadeh, & Ghorbanpur 2010; Ringim, Razalli & Hasnan, 2012). In this study, the BPR factor is going to be an independent variable for this study. Last but not least, the six BPR factors will be used as a measurement in Islamic banking which includes strategic alignment, management commitment, change management, customer focus, BPR project management and IT infrastructure.

2.4.1   Strategic Alignment

Strategic alignment is a mechanism that is enables organization to visualize relation between business process and strategies (Morrison, Ghose, Dam, Hinge, & Hoesch-Klohe, 2011). An organization goal is aligned with business model, processes and organization culture with key business and core values. It is also considered as alignment between the strategy, process and customer (Lockamy & Smith, 1997; Noel & Farnaz, 2010). They also have suggested that organization need to align core process with organization strategic objective in order to implement BPR in the best way. The alignment between the three factors will make BPR capable to be implemented in organization as well.

According to Lockamy and Smith (1997), strategic aligning between three factors is important to ensure the strategic objective is based on demand and requirement from customer. The selection of strategic alignment will give positive impact to customer and the re-engineering process would support the strategic goals. The Figure below shows the congruency between strategy, processes and customers.

Figure 2.1

Strategic alignment triangle (adopted from Lockamy and Smith (1997)).
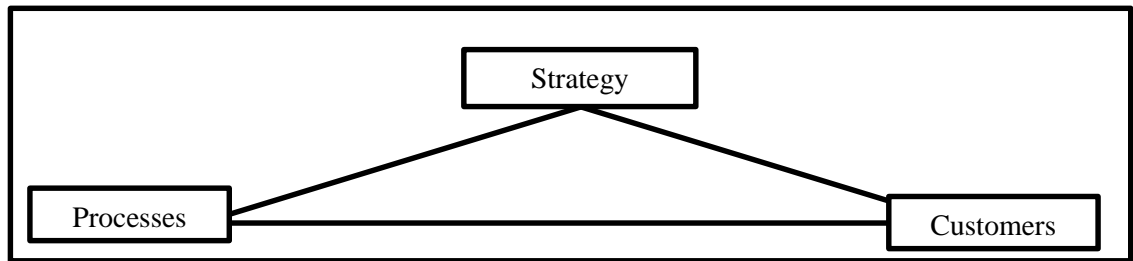
Pursuant to Kuwaiti and Kay (2000), strategy in broader concept is define as a coalition between knowledge and assumption about organization, goals, action, objective, budgets, and planning based on supplier, customer, resource, environment, competitor, organization and so forth. Furthermore, strategic alignment improves customer relationship management and services. Noel and Farnaz (2010) claimed that the strategic alignment generally focus to give the best service to the customer and prevent any waste activity. Due to the customer requirement, it is important to provide extra benefit to organization such as reduce time to market the product, low cost activity, high quality on product and improve the customer satisfaction. By implementing strategic alignment as a BPR factor, it is possible to increase the performance of Islamic banking in Malaysia. Morrison, Ghose, Dam, Hinge and Hoesch-Klohe (2011) clarify that strategic alignment is a method to understand the relationship between process and strategy. Other than that, strategic alignment is able to convince the organization to look forward for the future. Based on their result, strategic alignment will align strategies and process and it would help organization to realize their organization strategies.

2.4.2   Management commitment

Management competencies are essential matters that ensure the entire employee will do the right things and achieve remarkable goals. A lack of management support will make the organization fail to implement new creative and innovative approaches. The noticeable managerial practices directly will influence the success of BPR implementation if top management is supportive, shows an effort and commitment for organization (Habib, 2013). Based on the result of the research of Kamhawi (2008), the managers that have radical orientation about BPR approach is easy to apply and implement any approaches. Top management of the organization is committed to ensure that all of the employees have achieving dramatic in organizational improvement. Without support and sponsorship from management, it will make organization fail and ineffective to operate its daily routine. Top management should active, real, effective, supportive, and ensure the participation of all employees in organization. Top management should have several outstanding characteristic because top management is responsible to the organizational structure and activity (Singh & Kant, 2008). As a leader in the organization, they are responsible to involve in every step in process re-engineering because it have significant relationship with value, missions, and customer needs (Guo, 2004).   An involvement of top management is also enabling organization to establish justice to determine job, task and other activities to their employee. Additionally, the combination between leader's activities, roles and responsibility will influence the level of success in re-engineering approaches.

According to Sidikat and Ayanda (2008), in order to face the environment that have several challenges and continuous improvement, management should committed to

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develop activities by using the new strategy and approach to realize the dream and desire of the company. The roles of top management are important to all employees because manager need to increase the performance changes in organization and ensure it success (Caccia-Bava, Guimaraes & Guimaraes, 2013). To be a good leader, top management should have a knowledge and experience. Top management needs a capability to make a decision about BPR approach and knowledge to support the organization activity (Maleki & Beikkhakhian, 2011) because Cheng and Chiu (2008) clarify that most of employees require the commitment from management to guide them to engage with transformation. Occasionally, employees are also worried and not convicted to execute something without guideline and concurrence from top management. Hence, Campbell and Kleiner (2001) explained that top management must have high confidence level in managing organization if they want to achieve target and ensure the entire employee in organization to understand their responsibility.

Top management should have fully commitment in every aspect to support BPR approach (Herzog, Polajnar, & Tonchia, 2007). Top management also should consistent and support to be successful (Salimifard, Abbaszadeh, & Ghorbanpur, 2010) and apply it continuously (Al-Mashari & Zairi, 1999). In addition, Ringim, Razalli and Hasnan (2011) also claimed that management needs to focus on three criteria such as money, resource, and leadership in order to change capability and skill of employees. Management should consistent and strong in supporting of three elements (money, resource, and leadership) if they want to achieve better performance. Al-Mashari and Zairi (1999) also stated that management must have a capability to manage risk and sponsorship the financial resource. Sponsorship of financial resource will facilitate the implementation of BPR practices.

Without sponsorship from management, it can be ineffective to implement BPR practices. On the other hand, least of understanding between management and employee also become an indication of ill-prepared to successful in implementing BPR (Ringim, Razalli, & Hasnan, 2012). Top management should have an effective communication and motivate employee to do a movement in order to control BPR (Abdolvand, Albadvi, & Ferdowsi, 2008). Commitment from management is critically important because top management is responsible to determine direction and objective of organization.

2.4.3   Change Management

Change management is focuses on managing changes in organization to meet customer needs. Every transformation or changes in organization should be informed to all entire community in organization. Change management covers all human and social related in organization. Change management is being managed by manager or leader (Ringim, Razalli & Hasnan, 2011) and the communication from leader should be honest, open and frequent to achieve organizational objectives. Leader involvement will increase the level of success to implement BPR approaches. Due to the definition of reengineering, it is clearly not emphasized about restructuring, downsizing and automation (Ringim, Razalli, & Hasnan, 2011). Reengineering is about how the work is done without avoiding the elimination of job or people and it is also about process design.

Change management is very significant to restructure and redesign the operation and activities to avoid any problem and meet the customer demands. However, Wells (2000) stated in his study that change management includes organizational structure, education and training, performance measurement, employee empowerment and

communication. For example, after the organization executes reengineering, the measurement of employee and organization performance also will prove changes. In terms of education and training, organization should give an education and training to provide knowledge for their respective employee. Change management also must establish justice to their employee. In order to attain success in implementing change management, organization must really understand and has the power to manage the impact of implementation (Ahmad, Francis, & Zairi, 2007). Sidikat and Ayanda (2008) emphasizes that organization should concern the application of reengineering in order to sustain in marketplace, perform effectively and enhance organizational growth.

According to Al-Mashari and Zairi (1999), organization must have effective communication, have people empowerment, good training and development, create the effective culture to make changes, and must involving all people in organization in order to reach good performance in implementing BPR practices. It is evidence that change management gives a positive effect to the business performance as well (Wells 2000; Al-Mashari & Zairi, 2001; Khong & Richardson, 2003). The factor that are related to make change management to achieve success such as (1) reward and motivation, (2) effective communication, (3) organization culture, (4) stimulating receptivity to make change, (5) employee empowerment, (6) human involvement, and (7) training and education (Ringim, Razalli & Hasnan, 2011). Furthermore, other researcher like Storey and Westhead (1994) found on their study, relation between change management such as training with performance is not significant between change management and performance. It proves that, change management is not also significant with organization performance.

2.4.4 Customer Focus

Before the organization is trying to implement BPR approach, organization needs to make an assessment of customer focus. Customer focus evaluation is based on competitive analysis, customer research, and analysis from customer requirement and desire. Organization will achieve competitive advantage when firm are able to meet the customer requirement (Cheng & Chiu, 2008). By the same token, Cheng and Chiu, (2008) also divided customer focus into two variables which are requirement analysis from customer and organizations are able to produce products or services based on customer requirement. The evaluation of market needs and customer research is very important to improve organization performance (Idris, 2011). Furthermore, customer focus has a big opportunity to build a long term relationship and loyalty, and organization should provide the superior service to their staff and encourage them to build personal relation. In order to sustain the performance as a market leader, banking industry must increase the quality of customer service and customer focus (Akamavi, 2005; Ringim, Razalli & Hasnan, 2012). Service quality is an important thing for customer relationship management because it is obvious that every customer desires a good service. Akamavi (2005) also describes that organizational should empowered their staff to solve any problems if customer ask or request for unexpected things. Employees' empowerment will help organization to enhance customer satisfaction and loyalty if the employees can response quickly and effectively to the customer needs. To evaluate the level of customer satisfaction, Idris (2011) suggested that organization should conduct customer satisfaction analysis to their respective customer because it will provide assistance for organization to understand what should be done to improve the level of customer focus.

Benchmarking of customer requirement should be developed as an evaluation of customer relationship management and organization will use the benchmarking to apply reengineering. According to Wei and Nair (2006), the result from their research indicates that banking and financial institution in Malaysia is needed to implement customer service management to gain brilliant performance. Customer focus is required by the organization to execute re-engineering to ensure the re-engineering have the capability to attract customers and increase customer values. Organization should to gather the information from their customer to drive BPR project in the best way. Bhatt (2000); Salimifard, Abbaszadeh, and Ghorbanpur (2010) also emphasizes that BPR is focusing on the information from customer requirement then, produce services and products based on their needs and wants. In line with Cheng and Chiu (2008) statement, it is evidence that customer focus have a relationship with organization performance.

2.4.5 BPR Project Management

Effectiveness of BPR project will be a major factor to make a change in the organizational structure. The elements of BPR create new processes that can define jobs and the responsibilities across the existing organizational functions and integrate human resources into new responsibilities. Project management must often align with the strategy and competency of the organization. According to Al-Mashari and Zairi (1999), the factors that are related with BPR project includes organization must aligned the strategy of BPR with corporate strategy, organization must have an effective planning, organization must have a clear vision, organization must align BPR with key business process, organization should have consultancy effectiveness, development of expert team in BPR practices, effectiveness in organizational redesign, and measurement of BPR strategy for strategic

improvement. Kamhawi (2008) defines project management as an arrangement of managing BPR project with other activity and function of business. Organization should implement the new procedure in project management to improve company performance (Ringim, Razalli, & Hasnan, 2011). Unfortunately, it is still hard to achieve when organization is still applying old or traditional approach. However, the successful approach is based on the effectiveness of the projects that is being held by the organization.

Project management should be implemented because it will ensure the entire organization understand about the new approach of BPR. Successful implementation of BPR is depends on the BPR project itself (Al-Mashari & Zairi, 2000). Furthermore, Herzog, Polajnar, and Tonchia (2007) describe that BPR project management is a process or activity based on the requirement from customer. It is totally benefitting the company to meet customer requirement and demands. Additionally, employee must have proper knowledge and skills on these approaches before organizations implement the major re-engineering. Employees are encourage to attend the training to gain a skill about BPR from experts or consultant as the proper training (Ahmad, Francis, & Zairi, 2007; Salimifard, Abbaszadeh, & Ghorbanpur, 2010). Training and development on BPR project will help company to access workers' capability to manage BPR. The statement is supported by Setegn, Ensermu, and Moorthy (2013) which described that employees must have a power to organize and implement if the organization is expected to gain success in its performance. The selection of right and suitable project will improve the level or performance because due to the success BPR project, the organizational parties are able to craft and organize the right activities in the future. Pursuant to Khong and Richardson

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(2003), BPR project can achieve the objective if the participants in the projects follow the actual guidelines. The right guideline will drive the organization to organize right activities at the right time and place.

2.4.6 IT infrastructure

IT infrastructure development is depending on the organization expenditure for IT infrastructure, IT personnel training, and information system maintenance, IT consulting, proper IS integration, effective use of software tools, and increase IT competency. IT infrastructure is using electronic technology to undergo activities and basic business needs in all level (Ringim, Razalli, & Hasnan, 2011). In other words, IT is an automation of the new processes, activities, operation, information, telecommunication, using electronic technology and so forth. IT infrastructure enables the organization to share the resource using organizational technical and company capability (Bhatt, 2000). Besides that, IT infrastructure has also been considered as a vital component of successful BPR efforts. According to Ringim, Razalli, and Hasnan (2012), BPR is an effective method to improve organizations performance by providing a new approach in design and develop new strategies. Organization become effective when there are capable to align between IT infrastructure and BPR strategy to develop an effective IT infrastructure, maintenance, computers and software, and organization which are linked between computer and customer (Herzog, Polajnar, & Tonchia, 2007). Example of connection between customer and banking institution can be proved such as placement of automated teller machine (ATM) by banks firm, credit and debit card, and online banking application. Hence, the operation activities that linked between customer and computer will increase the

satisfaction of their customer which reduce the management cost and increase the speed of service and improve the service quality.

According to Ringim, Razalli, and Hasnan (2011), almost all of respondents were agreed that banking industry must enhance its IT software to efficiently and effectively manage daily operational activity. This situation shows that IT infrastructure is an important aspect because by using the IT infrastructure, banking will transform its manual or traditional approach to automatic or modern approach. Cheng & Chiu (2008) mentioned that banking sector will improve their performance by using the automation and change it from manual work. Therefore, the development of IT infrastructure will increase the level of public interest stake and satisfaction, and provide assistance to community in doing transaction activity and improve knowledge and skills of employees to apply technology as a new method.

Organization requires IT infrastructure because IT will integrate and connecting other department together and minimize the errors and will put the all system together (Bhatt, 2000; Akhavan, Jafari & Ali-Ahmadi, 2006; Ahmad, Francis, & Zairi, 2007). Obviously, by integrated all activity together, it will make the activity and approaches are running based on the actual planning and gives long-term benefit to organization. Akhavan, Jafari, and Ali-Ahmadi (2006), states that IT is very vital to help organization crafts and executes BPR as a strong technique in management. Furthermore, IT is also able to develop BPR to analyze model, map, evaluation and process need, and ensure the interest to help organization to be better in their performance continuously.

Organization must have a capability to produce products or services with innovation intuitive to attract clients. Organization require IT infrastructure to develop innovation. As cited by Ramirez, Melville, and Lawler (2010), new innovation in product and service will make organization became unique and reach competitive advantage in marketplace in term of sales and services. Furthermore, they added that IT will increase the profit and improve the quality and at the same time, it will improve the performance of the organization. Salimifard, Abbaszadeh, and Ghorbanpur (2010), also agreed that the success of IT applications will enhance the effectiveness of BPR implementation. Referring to Al-Mashari and Zairi (1999), the measurements of IT is very important factor to attain objective of BPR implementation. Thus, organization needs to build the effective IT infrastructure, effective in using software tools and integrate BPR strategy with organizational strategy. So, it is able to improve the banking performance effectively and efficiently if the organizational parties integrated together all the important aspect of IT infrastructure in BPR implementation.

2.5   BPR Failure Factors

Business Process Reengineering (BPR) implementation also has a possibility to be failed and some available risks in organization. Al-Mashari and Zairi (1999) claimed that the issue has discussed in their literature in which 50-70 percent companies that involved in implementation of BPR has failed to achieve its benefit and objectives. For some reasons, BPR also has a limitation to be implemented in the organization. Before the BPR approaches have been introduced and implemented, the organizational parties should

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organize research and development (R&D) and provides long term strategy and planning. The long term strategy and planning is needed and organizations will fail to implement BPR if the implementations are being done drastically and ignore other important matter (Terziovski, Fitzpatrick, & O'Neill, 2003).

According to Sidikat and Ayanda (2008), issues about BPR are an interesting topic to be discussed and most of the scholars and experts in BPR approach are aware with the possibility of BPR to be failed. Moreover, BPR is still controversial topic due to its uncertainty of performance level in the organization (Maull, Tranfield, & Maull, 2003). Sidikat and Ayanda (2008) also demonstrates the example list the failure factors of BPR implementation such as lack of commitment from management, BPR scope are not realistic, the organization is not ready to change, and the objective or concept is not same with organization objectives. Meanwhile, Mlay, Zlotnikova, and Watundu (2013) argued that the failure factors such as lack of involvement by employers and employees, lack of communication, lack of IT application, and lack of organization culture dissemination which are need to be considered.

2.5.1 Lack of Proper Strategy

The main reason of organizational failure in implementing BPR approach is because most of the organization is not able to align BPR project with organizational goals. The truth is organization is unable to understand and unaware to align existing process with BPR project. Lack of proper strategy will become a failure factor. According to Ringim, Razalli, and Hasnan, (2012), lack of strategy in BPR approach become the main failure factor of BPR implementation because lack of strategy prove that BPR strategy and the

company performance has non-significant relationship (Wu, 2002). The different between both of strategy gives a negative effect to the organizational performance.

Based on certain past business experience, organization can achieve success in implementing BPR practices when they have a good experience in managing financing and have a good planning to redesign the process (Fan, Md. Salah & Md. Shariful, 2012). Guo (2004) mentioned that focuses on re-engineering is needed by the organization to improve performance. In addition, Hanafizadeh and Osouli (2011) also explained that the organization needs to redesign their organization strategy in term of improvement and develop organization activity for the future benefit.

2.5.2   Unrealistic Objectives

In fact, unrealistic objectives are possibly can make business management become doubtful and not confident to execute BPR approach. Ringim, Razalli, and Hasnan, (2011) states that top management must set a long term target and have a vision and mission for company. Additionally, objectives of the organization need a proper guideline and disseminate to entire employee to improve the company performance in parallel with the organizational objectives. Maull, Tranfield, and Maull (2003) added that company requires clear and realistic objectives in order to implement BPR approach in a best manner.

According to Sidikat and Ayanda (2008), BPR is only can attain success if the organization activity is related and suitable with their company directions. Habib (2013) demonstrated that some companies are expected that implementation of BPR in short-term period requires a proper planning and implementation of BPR in long-term scope

needs an adequate research and resource. Most of the organization concludes that BPR is failed to be implemented when unrealistic objectives has been developed by top management. Referring to Al-Mashari and Zairi (1999), the realistic of focus and objective is critically important to gain success in implementing BPR approach.

2.5.3   No Clear Concept of a Process

Next, unclear concept of a process can be a failure factor to implement BPR approach. People are not spared from doing incorrect matters when they have misunderstanding interpretation about the concept. The different executive has a different approach about this concept (Kamhawi, 2008). The clear vision is needed from high level management to provide the direction in the right ways (Salimifard, Abbaszadeh, & Ghorbanpur, 2010). Pursuant to Al-Mashari and Zairi (2001), the understanding about BPR is needed to be concerned because misconception about this operation process will drive the employers or employees to be unable to handle reengineering process.

2.5.4   Lack of involvement

Then, lack of involvement is meaning that organization is not able to maximize the involvement of workforce such as employee, stakeholder, supplier and customer in this process. Mlay, Zlotnikova, and Watundu (2013) stated that BPR fails to be implemented if the organization is not able to make an internal transformation. It means that all organizational community should ready to make a transformation. Organization also should rethink the new strategy to increase the level of service quality to their customer (Maull, Tranfield & Maull 2003). Feedback from customer is needed by the organization to redesign further process and strategy. Furthermore, BPR strategies are implemented to

deliver value to their customer. According to Bontis (1998) in his journal, organization needs a leader that has a power of knowledge management to boost the performance. Nowadays, as a modern form of organization, the organization requires to improve communication using the latest technology like email or group-ware, and being more collaborative with other parties (Drew, 1996). The employers and employees involvement to work as a team is very essential because weaknesses of BPR teams with mechanism of responsibilities and job definition can cause failure in BPR implementation (Al-Mashari & Zairi, 1999).

2.5.5 Lack of Communication

According to Cheng and Chiu (2008), people are ready to make changes when they are really understand and ensure with the impact of a new challenge such as reason to change, understanding about BPR issues and have communication with all staff. Lack of communication in organization create a huge gap and can lead the organization to face a failure in implementing BPR approach. Al-Mashari and Zairi, (1999) also argued that lack of communication can lead the business to be unable to implement BPR approach. On the other hand, they also stated that effective communication and real information (Habib, 2013) is a major factor to gain success to implement BPR approach.

2.5.6 Lack of Commitment from Management

Lack of top management commitment can be a major failure factor in implementing BPR approach. Ringim, Razalli, and Hasnan (2011) define that the top management must become a leader or coach to their employees to ensure business process is running based on the planning and objectives. Top management is responsible to all of the plan and daily

transaction about financial, strategy, and other things which are depend on their decisions (Habib 2013). According to Guo (2004), the cause of failure of implementation of BPR is leadership by top management which are not aligned with work process, skill requirement and performance measurement. Campbell and Kleiner (2001) described that manager or leaders need to manage the vision, responsibility, commitment with work, and manage personal purpose and attitude.

According to Ringim, Razalli, and Hasnan (2012), the overall bank performance has direct and indirect relationship with top management commitment (Al-Mashari & Zairi, 1999). Herzog, Polajnar, and Tonchia (2007), also emphasized that every top management should alert with all activity and totally involve in implementing BPR approach. Al-Mashari and Zairi (1999) also stated that lack of commitment, support, leadership, championship and sponsorship from management teams will be the one of the failure factors to implement BPR approach. Top management is responsible to ensure the motivation of their workers reach the high level and always being supportive to the workers in order to achieve BPR implementation objectives.

2.5.7 Lack of IT Infrastructure

Referring to Mlay, Zlotnikova, and Watunu (2013), organization is facing a difficulty to implement BPR approach if the organization is unable to maximize the application of IT infrastructure. Drew (1996), added that IT is one of the strategies for BPR approach and the integration between IT strategy and BPR strategy is very important to achieve best BPR performance. Afterwards, Al-Mashari and Zairi (2001) stated that the simple tools and technique in which obtained supports from technology can help organization to

achieve BPR best performance. This is because lack of maximization of IT infrastructure will cause a failure in implementing BPR approach in organizations and it will face many more problems that related with IT sourcing, IT investment, ineffective reengineering Information System and incapability to integrate each other (Al-Mashari & Zairi, 1999).

2.5.8 Lack of Teamwork

Teamwork between employers and employees is very important for any group or department of the company. According to Herzog, Polajnar and Tonchia (2007) due to their respondent in their study, most of them agreed that teamwork is critically important to any organization. For example, the teamwork is able to access for good collaboration, quality of the output, and effectiveness and efficiency to solve any problems. And it is evidence that the weakness due to lack of teamwork will make the organization are fails to implement BPR approach proficiently. Organizations must move as a team and need to develop a dynamic environment in organization and all employees must friendly and trust each other (Maleki & Beikkhakhian 2011). Drew (1996) also argued that innovation and radical improvement in business can be achieved if the organizational society cooperate and enhance coherence to completed organizational tasks.

2.5.9 Lack of Previous Studies on BPR Factors and Performance in Banks

Most of the study is targeted to examine the relationship between BPR factors and organizational performance in several example of organizations such as manufacturing industry and other sectors (Guimaraes & Bond, 1996; Chang & Powell 1998; Sung & Gibson, 1998; Devaraj & Kohli, 2000; Devaraj & Kohli, 2000; Al- shammari, 2005; He, 2005; Ahmad, Francis, & Zairi, 2007; Herzog, Polajnar, & Tonchia, 2007; Abdolvand,

Albadvi, & Ferdowsi, 2008; Ozcelik, 2010; Maleki & Beikkhakhian, 2011; Fan, Md. Salah, & Md. Shariful, 2012; Habib, 2013; Mlay, Zlotnikova, & Watunu, 2013). Only few studies have been done such as the investigation of relationship between BPR and banking sector (Khong & Richardson, 2003; Terziovski, Fitzpatrick, & O'Neill, 2003; Sidikat & Ayanda, 2008; Cheng & Chiu, 2008; Salimifard, Abbaszadeh, & Ghorbanpour 2010; Ringim, Razalli, & Hasnan, 2012; Setegn, Ensermu, & Moorthy, 2013).

According to Ringim, Razalli, & Hasnan (2012), most of the researchers are conducted a study on successful BPR factors in the field of manufacturing industry and only minor research that discussed about BPR approach in banking industry. Maull, Tranfield, and Maull (2003) explained that the lack of relative study could create a big problem when the researcher need for references to completed the research report. In the same token, the study on banking industry also need to be concerned and lack of previous study about the effects of BPR toward banking performance will give a high credits and values to the current researchers (Terziovski, Fitzpatrick, & O'Neill, 2003). Unfortunately, lack of guidelines or sources about the BPR success factor also can contribute to failure of BPR factors. Pursuant to Al-Mashari and Zairi (2001), if organization has lack of methodology about BPR approach, it is possible that the new researchers will face the difficulties to construct the new research guidelines of BPR.

Table 2.2
Summary of the BPR success and failure factors

Method	BPR success factors	Failure factors
Business Process Reengineering (BPR)	1. Integrated BPR strategy with cooperate strategy. 2. Totally support from top management. 3. Ready to make changes. 4. More focusing on customer want and need. 5. Develop BPR project that integrated with company objective. 6. Improve the IT infrastructure.	1. Lack of proper strategy. 2. unrealistic objective 3. No Clear Concept of a Process 4. Lack of involvement. 5. Lack of Communication. 6. Lack of Commitment from Management. 7. Lack of IT Infrastructure. 8. Lack of Teamwork. 9. Lack of Previous Studies on BPR Factors and Performance in Banks

2.6 Different Between Previous Studies on BPR Factors and Performance in Banking Sectors

The present study is differs from the previous study in banking industries in terms of:

1. The focus of study is to measure the relationship between Business Process Re-engineering (BPR) and performance of Islamic banking in Malaysia which is focusing on Kedah. The study is focusing on Islamic bank performance.

2. The total independent variables in this study are six (6) variables compared to previous study which only applied four (4), five (5) and eight (8) variables.

3. Six (6) independent variables in this study are (1) strategic alignment, (2) change management, (3) management commitment, (4) customer focus, (5) BPR project management and (5) use of IT. The additional independent variables are adapted from Cheng and Chiu (2008).

4. The dependent variables for this study are based on Maqasid al-Shariah framework. Moreover, it based on Abu Zahra theory and has classified into three areas such as (1) Educating the individual, (2) Establishing justice and (3)

Promoting welfare (Mohammed, Razak, & Taib, 2008). It is differ from previous research which is mostly focused on measuring on financial and non-financial aspect. Khong and Richardson (2003) also measured the performance of banking sectors by using business performance, customer service management (Buavaraporn & Tannock, 2013; Wei & Nair, 2006) operation efficient, and cost reduction (Ringim, Razalli, & Hasnan (2012).

5. The focus scope of this study is organization. Islamic banking - Full-fledged Islamic banking, and Islamic window of conventional bank excluding the involving Islamic finance companies.

6. The research about BPR on Islamic bank performance is still new and fresh, and the research models are adapted from previous a research which shows the relationship between independent variable and dependent variable.

2.7 Resource-based view (RBV) theory

Resource-based view (RBV) theory can be defines as a resource based on process, assets and capabilities of organization. For underpinning theory, the researcher use RBV to underlying this study. RBV is focusing on available sources that controlled by organization and the organization have a capability to manage the resource (Amit & Shoemaker, 1993). Barney (1991) in his study emphasized that organization will avoid their competitor by using the unique resources. The unique resources also will become a competitive advantage for other competitors and it difficult to imitate or copy and find other substitutes. Organization resource is valuable and meaningful for organization to produce productivity. Organization will improve the competitive advantage and improve

long-term performance by maximization and possession the organization resources (Das & Teng, 2000). They also added that most of the empirical study also used RBV theory. For this study, the researcher also used RBV to underlying the relationship between BPR and Islamic banking performance.

Obviously, organizational resources will influence the organization performance. Wernerfelt (1984) explain in his study, the differentiation product and performance of organization is based on their resources because organization resources play as a backbone for organization. Resources is a assets which are possessed by organization, while capability is organization ability to combine resources such as improve workers' skills, organization practice, improve organizational innovation, improve work culture, and improve employee outperformer better than any competitors (Amit & Shoemaker, 1993). Pursuant to Barney (1991), the organization that exploited the resources and capabilities are able to perform better than other competitor.

Figure 2.2
Resourced-Based Theory Model
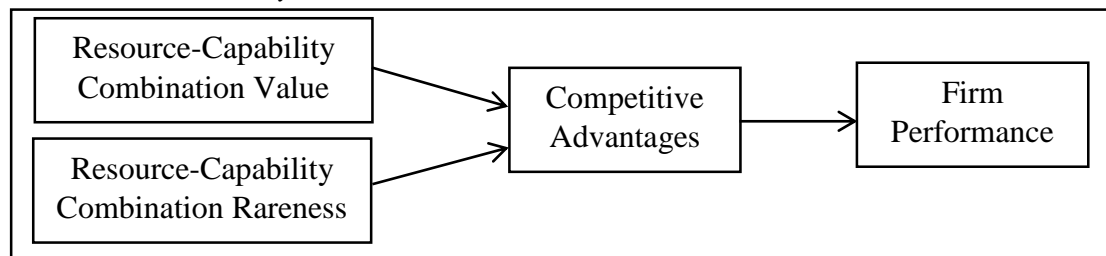
(Sources: Barney, 1991)

To improve competitive advantage, resources have been clarified into various categories by researcher. Fahy (2000) classified resources into tangible, intangible and capabilities. While Mills, Platts and Bourne (2003) classified resources into six categories such as (1) tangible resource (financial, physical, technological resources, and

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organizational); (2) intangible resources (innovation, human, and reputation resources); (3) procedural resources and system; 4) knowledge resources (skill and experience); (5) resources cultural and values; (6) network resources and resources with dynamic capability. Capabilities are ability of organization to develop and integrate resource to achieve organization goals. The RBV viewed the organization to develop resources to gain competitive advantage. The theory is totally relevant in this study because the utilization of BPR as strategic capabilities of organization is possible to improve their organization performance.

The study is focusing on intangible resources to realize the Islamic banking performance. BPR factors are placed under the context of RBV in organization which concerned about how organizations will improve their performance. The RBV has benefit to facilitate classification, enable comparison and provide strategic of measurement the resources. The performance of banking sectors is based on their organizational resources (BPR factor). RBV also emerged as a simple perspective to explain about the existence of specific assets and capability for the development of organizational strategy. Therefore, this research is focusing to determine the specific BPR factors that helping Islamic banking to achieve superior performance. Although RBV is beneficial for Islamic banking performance, but the theory has two major weaknesses. First, in term of industrial economy view; in which they assume RBV has static equilibrium, without addressing the need for continued success in an uncertain environment (Teece, Pisano, & Shuen, 1997), while the second weaknesses of RBV is in term of the difficulties and obstacles in competing firms imitate, replace or take away from the source rather than the complementary resource (Amit & Schoemaker, 1993). Referring to Teece, Pisano, and

Shuen (1997), in order to sustain competitive advantage, the organization should to reallocate, renew, upgrade, continuously identify, rejuvenate, reinvent and redefine the organization resources in business environment. Then, the organization also should have a capability to enhance and self-reinforce in the organizational environment. Due to this study, RBV is suitable for BPR and Islamic banking performance because both of resources will be examined in this study (Ringim, Razalli, & Hasnan, 2012).

2.8   Chapter Summary

This chapter provides the literature review on Islamic bank performance and BPR factors. This chapter also discuss about the theory that is suitable for this study. The discussions about resource-based view (RBV) theory are being elaborated in this chapter. Furthermore, this chapter also discussed about the differences of study on BPR approach with organizational performance. The literature review from previous studies provides the foundation to develop conceptual framework for this research.

The next chapter will discuss about framework model that is being used in this study. The researcher also makes the hypotheses based on the research questions and research objectives. This next chapter will further discuss about the methodology that have built to answer the research questions. Chapter Three will cover research framework, research hypotheses, research design, operational definition, research sample and population, instrumentation method, measurement of variables, data collection method and procedures, pilot test, reliability test, and data analysis technique.

CHAPTER 3

RESEARCH METHODOLOGY

3.1   Introduction

This chapter discusses about the research methodology which is important to conduct the study. Research methodology is important in this study to ensure all the result has high reliability and validity. In order to achieve research objective and to examine the hypotheses testing, efforts to make a data analysis and data sampling is needed to be concerned. Inaccurate information or blurred, and information overload could be occurred if the researchers is fail to implement the right approach.

This chapter is divided into several sections namely research framework, research hypotheses, research design, operational definition, research sample and population, instrumentation method, measurement of variables, data collection method and procedure, pilot test, reliability test, and data analysis techniques.

3.2   Research Model/Framework

The main purpose of this study is to investigate the relationship between BPR factors as independent variable such as strategic alignment, management commitment, change management, customer focus, BPR project management and IT infrastructure toward Islamic banking performance as dependent variable.

Next, to investigate the relationship between these two variables, the conceptual framework has been developed as shown in figure 3.1.

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Figure 3.1
Theoretical framework


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┌─────────────────────────────────────────────────────────────────────┐
│  ┌──────────────────────────┐      ┌──────────────────────────────┐  │
│  │ *Independent Variables*  │      │   *Dependent Variables*      │  │
│  └──────────────────────────┘      └──────────────────────────────┘  │
│                                                                       │
│    **Business Process Re-**           **Performance of Islamic**     │
│   **Engineering (BPR) factors**      **Banking Branches in Kedah**   │
│  ┌──────────────────────────┐                                        │
│  │ 1. Strategic Alignment   │  H2    ┌──────────────────────────┐    │
│  │ 2. Management Commitment │───────▶│ 1. Educating individual  │    │
│  │ 3. Change Management,    │                                        │
│  │ 4. Customer Focus        │ H1  H3 ┌──────────────────────────┐    │
│  │ 5. BPR Project Management│───────▶│ 2. Establishing justice  │    │
│  │ 6. IT Infrastructure     │  H4    ┌──────────────────────────┐    │
│  │                          │───────▶│ 3. Public interest       │    │
│  └──────────────────────────┘                                        │
│                                                                       │
└─────────────────────────────────────────────────────────────────────┘
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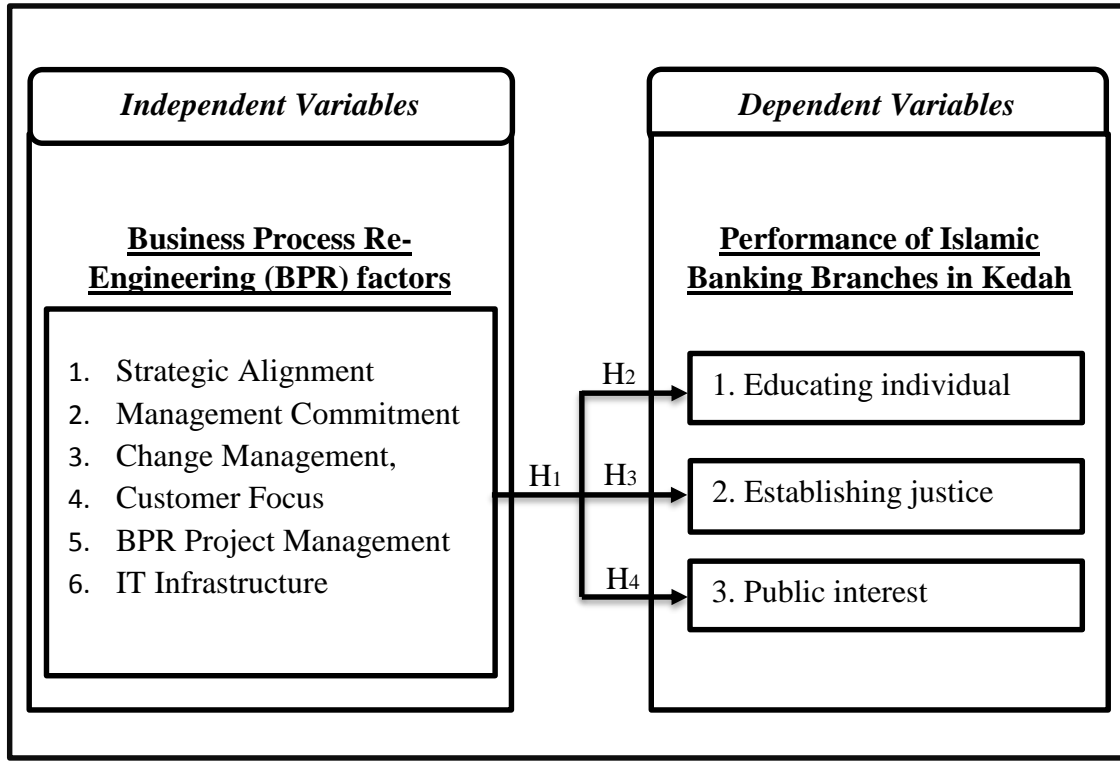
3.2.1   Dependent Variables

The dependent variable of this research is the performance of Islamic banking branches in Kedah which are divided into three basic performance measures includes educating individual, establishing justice and public interest in accordance with Maqasid al-Shariah framework (Mohammed, Razak, & Taib, 2008).

3.2.2   Independent Variables

In this study, there are six independent variables that have been used under Business Process Re-Engineering (BPR) (Cheng & Chiu, 2008) includes strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure.

3.3 Research Hypotheses

Based on the study, the researcher found that there are four main hypotheses. The study is intended to investigate the relationship between Business Process Re-engineering (BPR) factors and Islamic banking performance in Kedah. The summary of hypotheses is shows in Table 3.1.

Table 3.1
Summary of hypothesis

	Hypothesis
H1	**There is an influence of BPR toward the overall performance of Islamic banking branches in Kedah.**
H1a	There is an influence of strategic alignment toward the overall performance of Islamic banking branches in Kedah.
H1b	There is an influence of management commitment toward the overall performance of Islamic banking branches in Kedah.
H1c	There is an influence of change management toward the overall performance of Islamic banking branches in Kedah.
H1d	There is an influence of customer focus toward the overall performance of Islamic banking branches in Kedah.
H1e	There is an influence of BPR project management toward the overall performance of Islamic banking branches in Kedah.
H1f	There is an influence of IT infrastructure toward the overall performance of Islamic banking branches in Kedah.
H2	**There is an influence of BPR toward the performance of Islamic banking branches in terms of educating individual.**
H2a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of educating individual.
H2b	There is an influence of management commitment toward the Islamic bank performance in terms of educating individual.
H2c	There is an influence of change management toward the performance of Islamic banking branches in terms of educating individual.
H2d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of educating individual.

H2e	There is an influence of BPR project management toward the performance of Islamic banking branches in terms of educating individual.
H2f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of educating individual.
H3	**There is an influence of BPR toward the performance of Islamic banking branches in terms of establishing justice.**
H3a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of establishing justice.
H3b	There is an influence of management commitment toward the performance of Islamic banking branches in terms of establishing justice.
H3c	There is an influence of change management toward the performance of Islamic banking branches in terms of establishing justice.
H3d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of establishing justice.
H3e	There is an influence of BPR project management to toward the performance of Islamic banking branches in terms of establishing justice.
H3f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of establishing justice.
H4	**There is an influence of BPR toward the performance of Islamic banking branches in terms of public interest.**
H4a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of public interest.
H4b	There is an influence of management commitment toward the performance of Islamic banking branches in terms of public interest.
H4c	There is an influence of change management toward the performance of Islamic banking branches in terms of public interest.
H4d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of public interest.
H4e	There is an influence of BPR project management toward the performance of Islamic banking branches in terms of public interest.
H4f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of public interest.

3.4 Operational Definitions

In this section, the researcher is pointing out the operational definition of the topic that related in this study.

3.4.1   Islamic Banking Definition

Islamic banking is financial activities that consists of Shariah compliant or Islamic law, and based on Al-Quran and Sunnah of Prophet Muhammad P.B.U.H. Islamic banking industry are divided into three main categories such as full-fledged Islamic banking, Islamic window of conventional bank and Islamic finance companies (AT Kearney Analysis, 2012). For the purpose of this study, the survey only focuses on full-fledged Islamic banking and Islamic window of conventional bank. Full- fledged means all of the activity starting from the beginning until the end of operation is based on Islamic compliant. While Islamic window of conventional banks means that conventional banks which adopted the Islamic financial activity in the operation using the same entity.

3.4.2   Organizational Performance

The performances of the organization is measured based on actual output compared to input. Effectiveness defines as an achievement of organization in terms of goal and requirement from customer. While, efficiency means how the organization manage their resources to produce output and deliver to the customer. Based on Maqasid al-Shariah framework of Islamic banking industry, the performance is classified into three major categories such as (1) educating individual, (2) establishing justice and (3) public interest (Mohammed, Razak, & Taib, 2008).

(1) Educating the Individual

Educating the individual constructs are divided into three dimensions include advancement knowledge (education grant or scholarship and research funding), instilling a new skills and improvements (training) and create awareness of Islamic banking (publicity). The six items represent educating individual which indicated in Table 3.2.

(2) Establishing Justice

Establishing justice constructs are divided into three major dimensions such as fair returns (profit equalization reserves and net investment income), elimination of negative elements that bread injustices (interest free product) and cheap in product and services (total investment in mudharabah and musyarakah). The six items represent establishing justice which is shown in Table 3.2.

(3) Public Interest

Public interests constructs are also divided into three main dimensions include profitability of bank (net income and total assets), redistribution of income and wealth (zakkah and net income) and investment in vital economic sectors (investment in real sector and investment in services). The six items represent public interest which is shown in Table 3.2.

Table 3.2
The item to represent performance

ITEM
EDUCATING INDIVIDUAL
1   The bank annual expense budget allocation for Community Service Relationships on students scholarship that study on subject related to Islamic banking
2   The bank annual expenses on scholarship for Islamic banking and finance student as a ratio to annual total expenses
3   The bank yearly budget on new research activities for Islamic transactions
4   The bank annual expenditure for researches in the field of Islamic finance and banking as a ratio to annual total expenses
5   The bank annual budget on publicity for Islamic products and services
6   The bank yearly expenses on advertisement of Islamic product and services as a ratio to annual total expenses

	ESTABLISH JUSTICE
1	The periodic amount paid to stakeholders by the bank as share of profit from investment
2	The annual amount allocated to bank profit equalization reserve
3	The contribution of income from interest free product to the bank total annual income
4	The contribution of interest free income toward minimization of wealth disparity as a result of exploitation
5	The bank volume of current account product such as Al-Wadi'ah
6	The bank volume of expensive fund such as Musharakah investment

	PUBLIC INTEREST
1	The annual contribution of net income as a ratio to bank total assets
2	The amount paid for Zakkah by the bank
3	The bank annual exposure of investment to real sector
4	The bank annual exposure of investment to service sector
5	The fee based income on transaction services
6	The annual contribution on community service relationship

3.4.3   Business Process Re-engineering (BPR)

BPR factor elements (strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure) were adapted from suggested study by Cheng and Chiu (2008). The specific discussion about BPR factors will be further discussed the researcher.

3.4.3.1 Strategic Alignment

Strategic alignment defines as the extent of organization or banks to align BPR strategy with corporate strategy, the specific goal of achievement, clear vision, right process selection, and the strategy which is in line with key business and performance objective. Five items will be presented as a strategic alignment that shows in Table 3.3.

3.4.3.2 Management Commitment

Management commitment defines as the extent of management to satisfy customer requirement, ensure the dramatic improvement, giving initiative, willing to accept an implement and maintain competitive advantage in banking sector. The eight items will be demonstrated as a management commitment that shows in Table 3.3.

3.4.3.3 Change Management

Change management defines as the extent of management technique to manage the introduction of new operation process, new structure, new activity, and new working environment toward their entity, human, culture, and social changes. Management parties should have an effective communication, people involvement, provides training and education, and the readiness of transformation for management and employees. Table 3.3 outlined the item for change management.

3.4.3.4 Customer Focus

Customer focus defines as the management that is capable to meet customer demand based on their analysis from customer requirements, competitive analysis, and customer feedback about its products or services. Competitive advantage through the feedback from customer in order to redesign new process is critically important. Table 3.3 is being listed by the researcher to present customer focus.

3.4.3.5 BPR Project Management

BPR project management defines as the extent of management to gain effective consultation, effectiveness of BPR expert teams, clear vision, and clear selected criteria

to re-engineering, effective planning, and clear target to achieve key business process. Nine items are being presented as a BPR project management which shows in Table 3.3.

3.4.3.6 IT Infrastructure

The IT infrastructure defines as the extent of management expenditure on IT alignment, IT development, budget for hardware and software, effective application and the proper integration of IT. Effective application of hardware and software will be a main factor to gain success in implementing BPR approach. Five items are classified as IT infrastructure which shows in Table 3.3.

Table 3.3
The items to represent BPR factors

ITEM
STRATEGIC ALIGNMENT
1   The bank has align BPR strategy with corporate strategy
2   The BPR project goal is in line with the key business objective
3   The development of BPR vision is forming clearly and compelling for the future process
4   Process selection for BPR has a significant impact on customer satisfaction and retention
5   Process selection for BPR has significant with performance
MANAGEMENT COMMITMENT
1   Top management set strategic plans and activity for customer satisfaction through BPR.
2   Top management is committed to ensure employee contribution to the bank achievement of the remarkable improvement through BPR.
3   Top management often initiates BPR project.
4   Top management is willing to accept and implement a recommendation from BPR teams.
5   Top management encourages changes to maintain competitive advantage.
6   The top management considers BPR approach to improve competitiveness.
7   Top management considers BPR as method to improve operational process.
8   The key personnel in the bank are capable of carrying out related changes.
CHANGE MANAGEMENT
1   The bank and employee is ready to adapt new implementation of BPR.
2   There is openness by the management to accept changes for improvement.
3   The bank has effective communication system of updating employees on reengineering implementation.
4   The employees have clearly understood the norms, values and bank culture.
5   The bank has regular communication for effective communication delivery to all employees
6   The bank trains and educates employees in the newly introduced operational processes.
7   The employee accepts positive changes easily

	CUSTOMER FOCUS
1	The BPR project is based on the customer feedback.
2	The purpose of BPR is to find a new way of adding value to customers.
3	The bank would be able to meet customer demands in new products and services.
4	The customer feedback use when redesigning new processes.

	BPR PROJECT MANAGEMENT
1	The bank use a well-trained, diversified, and expert team to manage BPR project
2	The bank use re-engineering team to inform in BPR methods
3	The BPR team demonstrates dedication to the project
4	The BPR team shares a clear vision and understanding of BPR success
5	The bank use the external consultant to facilitating BPR projects
6	The bank has clear criteria to select what should be re-engineered
7	The bank has identify the appropriate process for BPR
8	The Re-engineering effort is towards key business process.
9	The bank establishes targeted performance improvement goal for processes.

	IT INFRASTRUCTURE
1	The bank aligns IT infrastructure and BPR strategy.
2	The bank builds an effective IT infrastructure.
3	The bank has sufficient budget for a purchase of an updated hardware and software for operational processes.
4	The bank has achieved proper integration of IT.
5	The bank makes effective use of software tools.

3.5   Research Design

Research design is a structure and strategy to investigate research question. The researcher highlighted that the nature of this study is based on quantitative approach. Sekaran and Bougie (2013) have identified that business research have three types 1) exploratory, 2) descriptive, and 3) causal. Exploratory study means to explore news areas of study while descriptive study is trying to describe systematically about phenomena, problem, information or programs about data, information, and sources that related with research interest. Then, causal study examines the variable which will become a factor for another variable to change. Thus, this study is based on explanatory study in which exploratory research is selected by the researcher based on the problem statement of this study. Furthermore, this study is something new to be explored as a vital and fresh academic field in Islamic banking.

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Research hypotheses are being constructed based on previous studies in regards to the relationship between Business Process Re-Engineering (BPR) (strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure) and performance of Islamic banking branches in Kedah. The primary data sources were applied by the researcher for this study to gain the information from the sample of respondents. The measurement method used by the researcher on each variable is cited based on previous studies where the items were applied in order to answer the research questions.

Questionnaires are used as a research instrument and distributed to the respondent, and being collected after the respondents has completed in answering the questionnaire. The benefit of using cross-sectional study is because the method does not take a long time and very economical. Sekaran and Bougie (2013) argued that unit of analysis are classified into five types such as individual, dyads, groups, organization, and culture. Unit of analysis that is being practiced by the researcher in this study is focused for organization. Organization are being chosen as a unit of analysis because based on problem statement and research objectives, this study focuses to measure the organizational performance, so organization is very suitable to be the unit of analysis. The respondents of this study involve directly or indirectly to implement BPR in Islamic banking and most of the respondents are manager, senior officer, and executive level. The respondents also have an experience and understanding about BPR (Cheng & Chiu; 2008). The research survey is conducted via face-to-face customer survey due to the reasons that this method is inexpensive especially in term of cost and time period. The questionnaires were

distributed directly to Islamic banking branches in Kedah. After that, the complete questionnaires were returned by hand and email from the respondents.

3.6 Research Population and Sample

The population process begins with determination of the size of total population. Population is referring as group of people, things or event of interest to investigate while sample is subset of population (Sekaran & Bougie, 2013). The target population is all Islamic banking branches in Kedah.

The reason of Islamic banking branches in Kedah is being selected as a population because Kedah has 77% Muslim people (Department of Statistics Malaysia, 2010). In addition, Kedah also have many future prospects to be developed as a developing state in term of political and development aspect. Future prospect and planning from government will directly or indirectly give benefits to the Islamic banking in Kedah as well. For instance, six mega projects in Kedah such as Lapangan Terbang Antarabangsa Kulim (KXP), Kedah Aero city, Sungai Petani-Kedah Inner Expressway (SPIKE), Kedah Rubber City, Kedah Science and Technology Park, and Kedah Medical Science City are certainly create big possibilities and opportunities from Islamic banking Kedah to be as advance entity. The efforts from many parties for the realization of this mega project is benefitting many individual or entity such as the local or foreign investor, the local community, the prospective employees, the potential customers, and other respective parties. Thus, in line with the future possibilities and opportunities in Kedah, it is obvious that it will create an advantages and possibility for Islamic banking industry in Kedah to enhance their total of customers by preparing the better products and services. Therefore, in accordance with

this research topic which is emphasizing the importance of BPR approach in Islamic banking, the selection of Islamic banking branches in Kedah as a sample of this study is critically to be considered due to future prospect and interest in this state.

On the other hand, Al-Nasser and Joriah (2013) claimed that most of the Muslim communities have realized the importance of applying the Islamic compliance in any financial activities. In other words, the acceptance of Muslim society in Malaysia towards the Islamic products and services has boosted the function, interest and characteristic of that Islamic instrument to be a well-recognized industry. Due to many Islamic full-pledged either local or foreign banking or Islamic window of conventional banks in Kedah, the acceptance of Muslim communities towards Islamic products and services in Kedah is undeniable. So, consistent with the increase of total number of customer, the role of BPR approach to determine the performance of Islamic banking is need to be concerned. That is why Kedah has been selected as a sample and population in this study.

In order to collect the information about total population size, researcher has submitted the application to bnmtelelink@bnm.gov.my and Department of Statistics Malaysia (Kedah) about the total Islamic banking branches in Kedah but the researcher are notified that the current or recent statistics are still not validated and finalized by Department of Statistic parties and researcher is suggested to refer from banking website. Due to that matter, researcher needs to refer from list of licensed Islamic banking in Bank Negara Malaysia (BNM) website. From 16 banks (Table 1.1), only 14 banks that operates in Kedah except Asian Finance Bank Berhad and Kuwait Finance House (Malaysia) Berhad. The assessment process was being conducted by the researcher to avoid duplicate data by using double checking and checklist. As a result, there are 63 banks (Table 3.4) as

a total population size. Since the total population size is 63 elements, Krejcie & Morgan (1970) recommended that the sample size should be 56 subjects for this review and represents 89% of the total population.

Table 3.4
List of banks branches in Kedah

BANKS	NO.	BANKS	NO.
Affin Islamic Bank Berhad	1	HSBC Amanah Malaysia Berhad	2
Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	1	Hong Leong Islamic Bank Berhad	1
Alliance Islamic Bank Berhad	1	Kuwait Finance House (Malaysia) Berhad	0
AmIslamic Bank Berhad	1	Maybank Islamic Berhad	14
Asian Finance Bank Berhad	0	OCBC Al-Amin Bank Berhad	1
Bank Islam Malaysia Berhad	11	Public Islamic Bank Berhad	1
Bank Muamalat Malaysia Berhad	4	RHB Islamic Bank Berhad	9
CIMB Islamic Bank Berhad	15	Standard Chartered Saadiq Berhad	1

There are two major type of sampling design namely probability sampling and non-probability sampling (Sekaran & Bougie, 2013). The suitable sampling design for this study is probability sampling either unrestricted (simple random sampling) or restricted (complex probability sampling) (Sekaran & Bougie, 2013). The researcher applied simple random sampling in this study. Simple random sampling are suitable in this study.

3.7 Instrumentation Method

First and foremost, Section one consists of 38 items of questions that are related to independent variables which are divided into six independent variables under BPR factors. This model was adapted from Cheng and Chiu (2008) which includes strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure.

Then, Section two comprises of 18 items that are related to dependent variable. Dependent variable is performance of Islamic banking branches. For a clear indication, the performance is divided into three basic performance measures include educating individual, establishing justice, and public interest based on Maqasid al-Shariah framework and the instrument is adapted from Mohammed, Razak, and Taib, (2008).

Last but not least, Section three consists of 7 items that are related to respondents' demographic. The demographic information includes gender, years of experience, position, total employee, location organization, and question related to BPR implementation. Thus, Appendix A shows the completed questionnaire for this study. The summary of all items in questionnaires are shown in Table 3.5.

Table 3.5
Summary of the Questionnaires

Category	Instrument	Coding	Item
Section 1 Business process re-engineering (BPR) practices			
A: Strategic Alignment	Adapted from Cheng & Chiu, (2008)	A1-A5	5 items
B: Management Commitment	Adapted from Cheng & Chiu, (2008)	B1-B8	8 items
C: Change management	Adapted from Cheng & Chiu, (2008)	C1-C7	7 items
D: Customer Focus	Adapted from Cheng & Chiu, (2008)	D1-D4	4 items
E: BPR project management	Adapted from Cheng & Chiu, (2008)	E1-E9	9 items
F: IT Infrastructure	Adapted from Cheng & Chiu, (2008)	F1-F5	5 items
Section 2. Islamic bank performance	Adapted from Mohammed, Razak, and Taib, (2008)	G1-G18	18 items
Section 3. Demographic	Gender, years of experience, position, total employee, location organization, etc.		7 items

3.8 Measurement of variable

In the first section of the questionnaire, Likert Scales with rating of 1 to 5 were used. The respondents are requested to indicate the extent to which they agree or disagree to the questionnaire surveys using the five point Likert Scales anchored by 1=strongly disagree, 5= strongly agree and 3= moderately (neither agree nor disagree) as a midpoint.

For the second sections, Likert Scales with rating of 1 to 5 were used. The respondents are requested to state the extent to which they agree or disagree to the

questionnaire surveys using the five point Likert Scales anchored by 1= Decrease Significantly, 5= Increase Significantly and 3= moderately (neither increase nor decrease) as a midpoint.

In the third section, the questions are based on demographic characteristic. Respondents are asked the question that related to gender, years of experience, position, total employee, location organization, and question related to BPR implementation.

3.9 Data Collection Method and Procedures

Most of the information, knowledge, theories, and findings are collected and cited from previous related journal of articles and books. The method used in this review for data collection is questionnaires survey. Structured questionnaires surveys are mainly chosen on the purpose of data collection from the respondent in order to fulfill research objectives and answer research questions. The method has been chosen due to some reason such as budget limitation and time constraint. The study has been conducted on all Islamic banking branches in Kedah. Transportation cost can be reduced significantly during the distribution process of questionnaires survey to the respective respondents. Questionnaires surveys have been selected because it is the most efficient and does not require a lot of time to be completed by the respondents compared to other methods.

In order to complete this study, questionnaires are distributed to Islamic banking branches in Kedah. All managers and executive level are qualified to answer the questionnaires. The data collection process has been done without any assistance from other parties. The distribution process was started on 10 March 2015 after getting approval from Schools of Othman Yeop Abdullah (OYA) for data collection. The period time to

collect the data is 40 days. Questionnaires were delivered by hand and email to all banks that applied Islamic banking branches in Kedah. The time provided to answer the entire question is very reasonable and suitable. Along with questionnaire, researcher also brought an accompanying letter approval from OYA about the purpose of data collection and significantly informed the respondents on how to answer the questions.

The total questionnaires that were delivered to the respondents are 63 questionnaires. As suggested by Krejcie & Morgan (1970), if the total population is 63 and sample size should be 56 subjects for this review and represent 89% of the total population, but the researcher decides to distribute the questionnaires to all of the population in Kedah in this study. In other words, it means that all Islamic banking branches are involved in this study. Nevertheless, at the end of data collection period, researcher was only able to collected 59 questionnaires from the respective respondents to be used in data analysis.

3.10   Pilot Test

The pilot test for this study was conducted by the researcher at the end of February 2015 before data collection activity. The pilot test was conducted by researcher to test the reliability of instrument is this study. The questionnaires should be testes whether it has weakness or not. Pilot test in this study used the reasonable sample to represent the target population. In prior to data collection, the researcher were inviting 5 people (3 from banks and 2 from academician) to review questionnaires for readability, structure, completeness, and ambiguity (Cheng & Chiu, 2008). Pilot study is also being conducted with 20 practitioners from banking persons to access the quality on this research (Cheng & Chiu,

2008). Finally, the survey was confirming after get back their feedback from the pilot study.

3.11   Reliability Test

The reliability test is applied in order to measure the goodness of the data which include the stability and consistency of the items. Cronbach's Alpha is the method which is used to examine the consistency of the data. According to Sekaran and Boguie (2013), they suggested that the closer the value of Cronbach's Alpha to 1, it will provide a higher reliability of internal consistency. In a meanwhile, the Cronbach's Alpha value which is less than 0.60 is considered to be poor while those in the range of 0.70 are acceptable. Whereas, the value over than 0.80 is considered as good and having a higher internal consistency.

Table 3.6
Coefficient of Cronbach's Alpha

Value	Level of Reliability
< 0.6	Weak
0.6 to < 0.7	Moderate / Received
0.7 to < 0.8	Good
0.8 to < 0.9	Very Good
> 0.9	Strong

(Source: Hair, Money, Samouel & Page, 2007; Sekaran & Boguie, 2013)

Table 3.7 shows the result of pilot test. Based on the pilot test, the reliability analysis for variable is very good. The Cronbach's alpha value for overall dependent variable is 0.952. It means the value shows the strong reliability. While the Cronbach's alpha value for overall independent variables (BPR factors) also shows an excellent or strong reliability of 0.957. Range for dependent variable is from 0.827 to 0.915. While for BPR factors, range of Cronbach's alpha included six independent variables is from 0.780 to 0.897.

Table 3.7
Reliability Statistic for Pilot Test

Items	Number of Items	Cronbach's Alpha
Dependent Variables	**18**	**0.952**
Educating Individual,	6	0.827
Establishing Justice	6	0.861
Public Interest	6	0.915
Independent Variables	**38**	**0.957**
Strategic Alignment	5	0.816
Management Commitment	8	0.865
Change Management	7	0.881
Customer Focus	4	0.780
BPR Project Management	9	0.856
IT Infrastructure	5	0.897

3.12 Data Analysis Techniques

In this study, the data analysis is being conducted using Statistical *Package for the Social Science (SPSS)* version 21. The SPSS is used to analyze all the data from questionnaires survey. There is several data analysis technique used in order to reach for the findings included:

1. Descriptive analysis

2. Validity and reliability test

3. Normality test

4. Correlation analysis

5. Multiple regression analysis

3.12.1 Descriptive Analysis

Before the researcher go through for any statistical analysis like correlation or multiple regressions, descriptive analysis is used to perform frequency analysis and identify the mean test. Descriptive analysis is important to avoid any test which is violated. Descriptive analysis is includes mean, range of the scores, standard deviation, kurtosis and skewness (Pallant, 2001). Researcher is used frequency analysis in analyze seven information of demographic background such as gender, years of experience, position, total employee, location organization, and question related to BPR implementation, and the means test is used to examine level of BPR influences on performance of Islamic banking branches. Furthermore, frequency analysis is important to identify any missing responses. Means test is used to separate between lower level and upper level of implementation as a midpoint because Healey (2005) determine descriptive analysis as a better instrument to balance with accurately.

3.12.2 Validity and Reliability Test

Validity analysis is applied by researcher to measure what are needed to measure (Hair, Babin, Money, & Samuel, 2003). Validity factor can establish by insert data for factors analysis (Sekaran & Bugie, 2013). Validity is becoming the essential answer about how the social reality can be measure in line of arrangement of origin researchers. The research instruments for BPR factors are adapted from Cheng and Chiu (2008) and for Islamic banks performance; the instruments are adapted from (Mohammed, Razak, & Taib, 2008). The tests of both variables are required to be conducted by the researcher as part of research needs because this test determines the quality of the research findings or results.

Reliability test is referring to consistent and stability of test in measuring both variables based on samples. A Cronbach's Alpha analysis is used to measure the reliability of instrument. Reliability test in this study is used by researcher for pilot test and actual test. If validity is not valid in this study, it means no point to discuss about reliability test. Both of tests are important to ensure the quality of result.

3.12.3 Normality Test

Normality test is prerequisite for analysis and it conducted to ensure the survey is normal distributed (Hair, Babin, Anderson, & Tatham, 2007). Normality test have several steps to be followed such as histogram, *stem-and-leaf plot*, and *boxplot* to ensure the normality of distribution. Appendix 2 indicates the histogram, *Normal Q-Q Plot*, *Defriended Normal Q-Q Plot* and *boxplot*.

3.12.4 Pearson's Correlation Analysis

Sekaran and Bugie (2013) explain that the Pearson correlation will indicate direction, significant, and strength among variables at ratio level and an interval. The Pearson correlation is used to examine the relationship between variable in this study and identified the direction of linear relation between of two variables. This analysis is used before analyze the multiple regressions. Pearson correlation can vary from -1.0 which considered as perfect negative correlation through 0.0 which is no correlation at all to +1.0 which considered as perfect positive correlation. The researcher indicates the scale according to Hair, Money, Samouel, and Page (2007) based on Table 3.8.

Table 3.8
The Coefficient Scale and Relationship Strength of Correlation

Coefficient Scale	Relationship Strength
± 0.91 - ± 1.00	Very Strong
± 0.71 - ± 0.90	Strong
± 0.41 - ± 0.70	Moderate
± 0.21 - ± 0.40	Weak
± 0.01 - ± 0.20	Very Weak

(Source: Hair, Money, Samouel and Page (2007))

3.12.5 Multiple Regression Analysis

Multiple regression analysis is a method to analyze link between several of independent variables and dependent variables. Multiple regression analysis is conducted to verify the relationship between the BPR factors as independent variables and the Islamic banking performance as dependent variable. Thus, it can measure either the independent variables able to influence dependent variable or not based on its regression result. It also used to identify the contributory of variables. Before the researcher proceeds with multiple regression analysis, preliminary assumption such as the linearity, normality and homoscedasticity is needed to be examined. Another assumption is ration of independent variables and outliers need to examine before conducting regression analysis (Coakes & Steed, 2007).

To determine the influence or significant between independent and dependent variables, it can be seen based on significant value and t value. If the significant value is bellow than $p < 0.05$ and t value is more than $t > 1.645$, it means that there are relationship and have significant relation (Gliner, Morgan, & Leech, 2009). Furthermore based on Gliner, Morgan, and Leech (2009), R square is used to interpret data in term of variance. For the sake of this study, multiple regression analysis is used to answer all of the hypotheses in this study.

Table 3.9
Summary of Data Analysis Techniques

	Hypothesis	Statistical Analysis
H1	**There is an influence of BPR toward the overall performance of Islamic banking branches in Kedah.**	Multiple Regression Analysis
H1a	There is an influence of strategic alignment toward the overall performance of Islamic banking branches in Kedah.	Multiple Regression Analysis
H1b	There is an influence of management commitment toward the overall performance of Islamic banking branches in Kedah.	Multiple Regression Analysis
H1c	There is an influence of change management toward the overall performance of Islamic banking branches in Kedah.	Multiple Regression Analysis
H1d	There is an influence of customer focus toward the overall performance of Islamic banking branches in Kedah.	Multiple Regression Analysis
H1e	There is an influence of BPR project management toward the overall performance of Islamic banking branches in Kedah.	Multiple Regression Analysis
H1f	There is an influence of IT infrastructure toward the overall performance of Islamic banking branches in Kedah.	Multiple Regression Analysis
H2	**There is an influence of BPR toward the performance of Islamic banking branches in terms of educating individual.**	Multiple Regression Analysis
H2a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of educating individual.	Multiple Regression Analysis
H2b	There is an influence of management commitment toward the Islamic bank performance in terms of educating individual.	Multiple Regression Analysis
H2c	There is an influence of change management toward the performance of Islamic banking branches in terms of educating individual.	Multiple Regression Analysis
H2d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of educating individual.	Multiple Regression Analysis
H2e	There is an influence of BPR project management toward the performance of Islamic banking branches in terms of educating individual.	Multiple Regression Analysis
H2f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of educating individual.	Multiple Regression Analysis

H3	**There is an influence of BPR toward the performance of Islamic banking branches in terms of establishing justice.**	Multiple Regression Analysis
H3a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of establishing justice.	Multiple Regression Analysis
H3b	There is an influence of management commitment toward the performance of Islamic banking branches in terms of establishing justice.	Multiple Regression Analysis
H3c	There is an influence of change management toward the performance of Islamic banking branches in terms of establishing justice.	Multiple Regression Analysis
H3d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of establishing justice.	Multiple Regression Analysis
H3e	There is an influence of BPR project management to toward the performance of Islamic banking branches in terms of establishing justice.	Multiple Regression Analysis
H3f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of establishing justice.	Multiple Regression Analysis
H4	**There is an influence of BPR toward the performance of Islamic banking branches in term of public interest.**	Multiple Regression Analysis
H4a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of public interest.	Multiple Regression Analysis
H4b	There is an influence of management commitment toward the performance of Islamic banking branches in terms of public interest.	Multiple Regression Analysis
H4c	There is an influence of change management toward the performance of Islamic banking branches in terms of public interest.	Multiple Regression Analysis
H4d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of public interest.	Multiple Regression Analysis
H4e	There is an influence of BPR project management toward the performance of Islamic banking branches in terms of public interest.	Multiple Regression Analysis
H4f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of public interest.	Multiple Regression Analysis

3.13 Chapter Summary

In this chapter, the researcher discussed about the research methodology. The researcher have also explains about conceptual framework, research hypotheses, research design, operational definition, research sample and population, instrumentation method, measurement of variables, data collection method and procedure, pilot test, reliability test, and data analysis techniques. The discussion about questionnaires also has been elaborated by the researcher based on the research objectives and literature review. This chapter also discussed about reliability and pilot test which was conducted. In the next chapter, the researcher will clarify about findings of this study.

CHAPTER 4

RESULTS AND DISCUSSION

4.1   Introduction

The findings of survey were analyzed based on the research objectives in Chapter One and the data were analyzed in the form of texts, figures, and tables. After that, this chapter also discussed and demonstrated full result, and the interpretation in this chapter. The data was analyzed using *Statistical Package for the Social Science (SPSS)* version 21. The following categories explain the data analysis.

    i)   Descriptive Analysis

    ii)   Validity and Reliability Test

    iii)   Pearson's Correlation Analysis

    iv)   Multiple regression Analysis

Subsequently, the researcher also performs hypotheses testing in order to ensure whether the hypothesis is accepted or rejected. Several outputs and discussions about the results were summarized in accordance with the research findings. The summary of the findings has been highlighted to enhance the level of understanding of respective readers in this study.

4.2 Data Screening

After the collection of completed questionnaires, the quality control of data from the survey was essential and complicated task. For this matter, the researcher needed to ensure that all questions were answered. Referring to Hojstrup (1993), it would be very helpful especially for experienced person to simply distinguish the good or bad data with sufficient amount of time which obtained from the respondents. The effort in distinguishing different types of raw data in this first step of data process analysis enabled the researcher to have automatic indicators to remove the parasite and unattended data.

According to Hair, Black, Babin and Anderson (2010), the missing data which observed by the researcher should be deleted if the missing data is more than 15% but the researcher need to ensure that the sample of the study is still adequate. This recommendation in parallel with Tabachnick and Fidell (2007) that data screening crucial to increase the statistical method in the analysis and the researcher just need to simply drop the missing data. The problem encountered in data screening needed to be considered to ensure a strong statistical assessment. Based on this research, there was no missing value in this analysis and the analysis can be carried out more efficiently by the researchers.

4.3 Descriptive Analysis

Descriptive analysis had been applied in this study to perform frequency analysis and to determine the value of mean. At the beginning of this chapter, researcher was elaborating in details about frequency analysis. For a clear indication, a total of 63 questionnaires were distributed to executive level or top management in which represent Islamic banking branches in Kedah by using disproportionate stratified random sampling. However, the researcher only gained back 59 but it still more than the targeted samples (56 samples). At the end of study, the researcher only used 54 or 86% set of questionnaires to make an analysis after the process of data cleaning and elimination of five outliers.

Frequency analysis was one of the important analyses in research development. Frequency analysis is being conducted to gain the total number of participation in this study with the differences of respondents' values and background. In Section Three, there was seven questions that related to the demographic of respondents such as gender, years of experience, position, total employee, location organization, and questions related to BPR implementation in Islamic banks branches in Kedah.

Based on 54 samples that successfully collected by the researcher, researcher can effectively analyze the different demographic between respondents. Demographic information was divided into two categories namely personal information and BPR information. In term of personal information, the gender composition showed that 63% were male and 37% were female. The composition of gender is shown in Table 4.1.

Table 4.1
Composition of Respondents by Gender

Gender	Frequency	Percentage (%)
Male	34	63.0
Female	20	37.0

The next part was concerned with years of experience. The highest years of experience in this research was 11 years and above which demonstrated 51.9% followed by 6 – 10 years and 2 – 5 years which represented 22.2% and 20.4 %. While the lowest years of experience were 1 years bellow with only 5.6% from the total samples of this study. It means that the most of respondents were a senior executive level an above. Table 4.2 presents the respondents based on years of experience.

Table 4.2
Composition of Respondents by Year of Experience

Years of Experience	Frequency	Percentage (%)
< 1 years	3	5.6
2 – 5 years	11	20.4
6 – 10 years	12	22.2
> 11 years	28	51.9

In terms of the job title in branches, most of the respondents were branch executive which was representing 79.6% of total respondents and only 20.4 % were representing branch manager. The composition of respondents based on job title is shown in Table 4.3.

Table 4.3
Composition of Respondents by Job Title

Job Title	Frequency	Percentage (%)
Branch manager	11	20.4
Branch executive	43	79.6

Afterwards, in term of Islamic banks information, the respondents were asked about the total employees, type of branches location, and questions about BPR implementation in Islamic banking branches. The large number of employees in this study was 21 and above or 55.6% of employees. Meanwhile, the total number of around 1 – 20

employees was 44.4%. It shows that most of branches in this studies had more than 21 employees in Islamic banking firms. Table 4.4 indicates the total number of employees in each branch.

Table 4.4
Composition of Respondents by the Number of Employee in Each Branch

Number of employee	Frequency	Percentage (%)
1 – 20	24	44.4
20 above	30	55.6

Next, the location of Islamic banking branches was divided into two categories such as rural and urban area. Rural area presented only 29.6% and urban area was 70.4% in this study. It means that most of Islamic banking branches in Kedah was located in urban area. All the composition of branch location is shown in Table 4.5.

Table 4.5
Composition of Respondents by the Type of Branch Location

Type of branch location	Frequency	Percentage (%)
Rural	16	29.4
Urban	38	70.4

Based on the findings, most of the Islamic banking branches in Kedah which was represented 92.6% of total respondents have possessed a capability to reengineer the operational process based on their result of BPR implementation. While only 7.4% of the total respondents are not used the result of BPR to reengineer any operation. Table 4.6 shows the information about the implementation results of BPR to reengineer any process or activity.

Table 4.6
Composition of Branches using Result of BPR to Re-engineer Any Process

Using result of BPR to reengineer any process	Frequency	Percentage (%)
Yes	50	92.6
No	4	7.4

Furthermore, most of the respondents were chosen to improve the quality of customer service as a priority for branches and followed by increasing revenues with 33.3% and 25.9%. The next objective of BPR program was proactive approach to prepare the organization with 16.7% and 14.8% for reducing operating cost. While only 9.3% of total respondents were choosing reactive approach to competitive pressure as a priority of objective BPR program. Table 4.7 shows the specific number of respondent.

Table 4.7
Composition of Objective BPR Program

Objective BPR program	Frequency	Percentage (%)
Increasing revenues	14	25.9
Improving the quality of customer service	18	33.3
Reactive approach to competitive pressure	5	9.3
Proactive approach to prepare the organization	9	16.7
Reducing operating cost	8	14.7

Descriptive analysis becomes the common and general trends in measuring the instrument in data analysis. Descriptive analysis is summarizing all of the data and explains what occurred on data samples. The full analysis of descriptive on this study is shown in Table 4.8.

Based on the finding on descriptive analysis, the mean for overall performance was 3.67 and the standard deviation is 0.377. The highest mean for dependent variable in terms of public interest which was 3.79 followed by 3.65 for establish justice and the least

mean was educating individual with 3.59. For standard deviation, it showed the highest performance measurement was public interest which is 0.498 and the least standard deviation was educating individual with 0.409.

While, the finding for independent variables show the highest mean was 3.93 (strategic alignment) and followed by management commitment, BPR project management, customer focus with 3.89, 3.86, 3.80. Change management and IT infrastructure showed the same mean which were representing 3.76. For standard deviation, the highest independent variable was strategic alignment with 0.462 and the least was 0.331 with represented by BPR project management.

Table 4.8 also demonstrates the value of skewness. The dependent variable for overall performance was negative skew at -0.68. While dependent variable for each measurement showed that educating individual was positive skew at 0.299 and other performance like establish justice and public interest was negative skew at -0.77 and -0.07. However, for independent variables, strategic alignment, change management and customer focus was positive skew at 0.157, 0.100 and 0.079 while for others three independent variables like management commitment, BPR project management and IT infrastructure was negative skew with the value of -0.331, -0.139 and -0.469. However, the value for both independent and dependent variable is between -1 and +1. It means all the value is near to normal (normal = 0).

For kurtosis analysis, the dependent variable for overall performance was -0.857. Other performance also showed negative kurtosis which was educating individual at -0.131, establish justice at -0.939 and public interest at -0.567. While for independent variables, the three variables were positive kurtosis such as strategic alignment,

management commitment and BPR project management at value 0.121, 0.446, and 0.047. There were three factors indicate negative kurtosis like changes in management, customer focus, and IT infrastructure at -0.998, -0.941, and -0.196. Based on the result, the kurtosis value for independent and dependent variables were excellent because the value is between -3 and +3. The normal value for kurtosis was zero (normal = 0). It means the curve for kurtosis is not very high or not very sloping.

Table 4.8
Summary of Descriptive Analysis (N = 54)

Items	Mean	Standard Deviation	Skewness	Kurtosis
Dependent variable (DV)				
Overall performance	3.67	0.377	-0.068	-0.857
Educating individual	3.59	0.409	0.299	-0.131
Establish justice	3.65	0.442	-0.077	-0.939
Public interest	3.79	0.498	-0.007	-0.567
Independent variable (IV)				
Strategic alignment	3.93	0.462	0.157	0.121
Management commitment	3.89	0.376	-0.331	0.446
Change management	3.76	0.457	0.100	-0.998
Customer focus	3.80	0.437	0.079	-0.941
BPR project management	3.86	0.331	-0.139	0.047
IT infrastructure	3.76	0.646	-0.469	-0.196

4.4 Validity and Reliability Analysis

The validity and reliability analysis in this part was done to ensure the questionnaires of this research were valid.

4.4.1 Validity Test for Dependent and Independent Variables

Based on measurement of validity for dependent variables and independent variables. Overall measurement for dependent and independent variables were valid because this study was only adapted from Mohammed, Razak, and Taib (2008) for performance measurement in terms of Maqasid Al-Shari'ah and measurement for independent variables also were valid researcher only adapted from Cheng and Chiu (2008). Others

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previous researchers also using the same measurement in the same scope and it proved that the instrument for dependent and independent variables are valid to be applied in this study.

4.4.2 Reliability Test

Reliability analysis is important to the researcher to measure the data consistency. Reliability is measurement technique to ensure consistency on the repeated application (Weiner, 2007). Cronbach's Alpha procedure was used to test the reliability of the questionnaires. Sekaran and Bugie (2013) emphasized that alpha value which was closed to 1 means that the research data has high level of reliability (Cronbach's Alpha => 0.90). Then, if the alpha value is lower than 0.6, it is assumed that the instrument used in this study is low reliability (Cronbach's Alpha =< 0.60).

The reliability result for this study is shown in Table 4.9. Based on analysis result, the reliability test for dependent and independent variable in this study was acceptable and very good. For dependent variable, Cronbach's Alpha value for overall performance of Islamic banking in Kedah outlined a very good reliability which is present 0.884. While the Cronbach's Alpha for overall independent variable (BPR factors) shows excellent reliability at 0.900. The Cronbach's Alpha for dependent variables item like educating individual, establish justice, and public interest is 0.742, 0.753, and 0.840. It means that the level of reliability was very good. For dependent variables, six BPR factors represented that the level was acceptable and very good. Strategic alignment (0.780), management commitment (0.749), and change management (0.782) were showing good reliability. While the customer focus and BPR project management showed that the level

of reliability is acceptable on the range between 0.612 and 0.688. Then, IT infrastructure was acceptable in which the value of Cronbach's Alpha was 0.897. The statistic of reliability analysis for independent and dependent variables are show on Appendix 4.

Table 4.9

Reliability Statistic for the Data Gathered from Survey

Items	Number of Items	Cronbach's Alpha
Dependent variable (DV)		
Overall performance	**18**	**0.884**
Educating individual	6	0.742
Establish justice	6	0.753
Public interest	6	0.840
Independent variable (IV)		
Overall BPR factors	**38**	**0.900**
Strategic alignment	5	0.780
Management commitment	8	0.749
Change management	7	0.782
Customer focus	4	0.612
BPR project management	9	0.688
IT infrastructure	5	0.897

4.5   Pearson's Correlation Analysis

Based on this study, researcher was conducted this analysis to explore a strength and direction of between these two of variables. This analysis was done to determine 1) the relationship between BPR factors and overall performance of Islamic banking branches, 2) the relationship between BPR factors and educating individual 3) the relationship between BPR factors and establish justice 4) the relationship between BPR factor and public interest. If value of the correlation is 0, it means no correlation, 1.0 means positive correlation and -1.0 means the correlation is negative correlation (Pallant, 2001). Table 3.9 shows the relationship between two variables either it very weak, weak; moderate, strong or very strong of relation (Hair, Money, Samouel, & Page, 2008). All of the procedure is subjected to two-tailed test which were divided into two level; significant

(p<0.05), and significant (p<0.01). Table 4.10 shows the summary of the correlation analysis and full statistical of correlation analysis is shown in Appendix 5.

Table 4.10
Pearson's Correlation between the Constructs

	1	2	3	4	5	6	7	8	9	10
1. Strategic Align.	1									
2. Mgt. Commit.	.484**	1								
3. Change Mgt.	.278*	.407**	1							
4. Customer Focus	.354**	.320*	.344*	1						
5. BPR Pro. Mgt.	.408**	.303*	.409**	.446**	1					
6. IT Infrastructure	.258	.486**	.272*	.337*	.584**	1				
7. Overall Perform	.325*	.504**	.395**	.639**	.629**	.571**	1			
8. Edu. Individual	.178	.295*	.177	.513**	.497**	.390**	.790**	1		
9. Est. Justice	.381**	.456**	.315*	.602**	.570**	.521**	.847**	.513**	1	
10. Public Interest	.253	.497**	.472**	.494**	.513**	.512**	.867**	.517**	.612**	1

Note.   **. Correlation is significant at the 0.01 level (2-tailed).
          *. Correlation is significant at the 0.05 level (2-tailed).

1) The relationship between BPR factors and overall performance of Islamic banking branches in Kedah

Based on Table 4.10, the correlation analysis between strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure with overall performance of Islamic banking branches had a positive correlation which was r= 0.325, 0.504, 0.395, 0.639, 0.629, and 0.571 and all the BPR factors have significant correlation at level p<0.01 except strategic alignment in which this variable was at level p<0.05. The relationship strength for strategic alignment and change management with overall performance was weak. For management commitment, customer focus, BPR project management, and IT infrastructure with overall performance of Islamic banking in Kedah, the relationship strength was moderate.

2) The relationship between BPR factors and educating individual (dimension of banks performance).

Referred to Table 4.10, the analysis demonstrated positive correlation between strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure with educating individual (dimension of banks performance) with r= 0.178, 0.295, 0.177, 0.513, 0.497, and 0.390 at level $p < 0.01$ for customer focus, BPR project management, and IT infrastructure, and level $p < 0.05$ for management commitment. The relationship for strategic alignment and change management in this study indicated weak relationship. Relationship strength for management commitment and IT infrastructure with educating individual was weak relationship and moderate relationship for customer focus and BPR project management.

3) The relationship between BPR factors and establish justice (dimension of banks performance).

Table 4.10 showed the correlation analysis between strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure with establish justice (dimension of banks performance) was positive correlation at r= 0.381, 0.456, 0.315, 0.602, 0.570, and 0.521, and all correlation of BPR factors are $p < 0.01$ except change management which was $p < 0.05$. Thus, the relationship strength for management commitment, customer focus, BPR project management, and IT infrastructure had moderate relationship and strategic alignment and change management have weak relationship with establish justice.

4) The relationship between BPR factor and public interest (dimension of banks performance).

Lastly, Table 4.10 proves that the analysis shows the positive correlation between strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure with public interest (dimension of banks performance) with r= 0.253, 0.497, 0.472, 0.494, 0.513, and 0.512. All the BPR factors were significant correlation at level $p<0.01$ except strategic alignment in which the relationship strength for strategic alignment was very weak with public interest. Others BPR factors indicate the moderate strength of relationship with public interest as a dimension of banks performance.

4.6   Multiple Regression Analysis

Multiple regression analysis was conducted to analyze the relationship between independent variables and dependent variables. Independent variables (IV) were BPR factors and dependent variables (DV) were including 1) overall performance 2) educating individual 3) establish justice and 4) public interest. This analysis was important to analyze whether the independent variables were able to influence the dependent variables. The analysis also was conducted to answer the research objectives and hypotheses in this study. In this analysis, 28 hypotheses were analyzed by using multiple regression analysis to ensure the relationship between IV and DV. The details about multiple regression analysis can be referred in Appendix 6.

1. **Multiple regression analysis results and hypotheses test between BPR factors and overall performance of Islamic banking branches in Kedah.**

H_1 was tested by using multiple regression analysis. The result of analysis explained that R Square value was 0.642 or 64.2% of variance. The F value = 14.039 and significant value was 0.000 (p<0.05). The hypotheses were accepted and it means the BPR were influence overall performance of Islamic banking branches. Furthermore, hypotheses H_{1b}, H_{1d}, and H_{1e} also were accepted when the value of β = 0.258, 0.397, and 0.332 and *t* value was 2.198, 3.889, and 2.682 respectively. The *t* value should more than 1.645 (t >1.645) and the significant value should less than 0.05 (p<0.05). The significant value for H_{1b}, H_{1d}, and H_{1e} was 0.033, 0.000, and 0.010. It means that the value is less than 0.05. Hypotheses H_{1b}, H_{1d}, and H_{1e} were accepted by the researcher and it means that management commitment, customer focus, and BPR project management able to influence overall performance of Islamic banking branches.

However, hypotheses H_{1a}, H_{1c}, and H_{1f} were rejected after the value of β = H_{1a} (-0.116), H_{1c} (0.011), and H_{1f} (0.144) was being demonstrated. Hypotheses H_{1a}, H_{1c}, and H_{1f} were rejected because the *t* value should more than 1.645 (t >1.645) which was -1.078, 0.110 and 1.206. Furthermore, the significant value for H_{1a}, H_{1c}, and H_{1f} was 0.287, 0.913, and 0.234 or the significant value is more than 0.05 (p<0.05). The hypotheses of H_{1a}, H_{1c}, and H_{1f} were rejected and it means that the strategic alignment, change management, and IT infrastructures not able to influence the overall performance of Islamic banking branches. Table 4.11, illustrating the summary of Hypothesis 1.

Table 4.11
Multiple Regression Analysis for Hypothesis 1 (N=54)

BPR factors and Islamic banks Performance	Variables	Hypotheses	Performance (β)	Sig.	t
Independent Variables Statistic Summary	Overall performance Islamic banks	H1	0.596		
	R^2		0.642		
	F		14.039		
	P		0.000^b		
	Strategic Alignment,	H1a	-0.116	0.287	-1.078
	Management Commitment	H1b	0.258	0.033*	2.198
	Change Management	H1c	0.011	0.913	0.110
	Customer Focus	H1d	0.397	0.000**	3.889
	BPR Project Management	H1e	0.332	0.010*	2.682
	IT Infrastructure	H1f	0.144	0.234	1.206

$p* < 0.05$, $p** < 0.01$

2. **Multiple regression analysis results and hypotheses test between BPR factors and educating individual (dimension of banks performance).**

Based on multiple regression analysis, R Square value is 0.397 or 39.7% of variance. The F value = 5.156 and significant value is 0.000 (p<0.05). Hypothesis H2 was accepted and it means that BPR were able to influence educating individual in term of banks performance. Hypotheses H2d and H2e were accepted after the significant value is less than 0.05 which was stated 0.006 and 0.022. In addition, the *t* value was more than 1.645 (t >1.645) which the *t* value was 2.903 and 2.365. The value of β for H2d and H2e was 0.384 and 0.380. Hypotheses H2d and H2e accepted and it proves that customer focus and BPR project management were able to influence educating individual in term of banks performance.

Meanwhile, hypothesis H2a, H2b, H2c, and H2f was rejected when the *t* value less than 1.645 which the *t* value was -1.213, 1.200, -1.101, and 0.210. The β value for H2a, H2b, H2c, and H2f was -0.169, 0.183, -0.147, and 0.033. Furthermore the hypotheses were rejected because the value of p was more than 0.05 (p<0.05) which H2a, H2b, H2c, and H2f was 0.231, 0.236, 0.277, and 0.835. Based on the result of multiple regressions, H2a, H2b, H2c, and H2f were rejected and it means that the strategic alignment, management commitment, change management, and IT infrastructure not able to influence the performance. Multiple regression analysis for Hypothesis 2 is shown in Table 4.12.

Table 4.12
Multiple Regression Analysis for Hypothesis 2 (N=54)

BPR factors and Islamic banks Performance	Variables	Hypotheses	Performance (β)	Sig.	*t*
Independent Variables Statistic Summary	Educating Individual (dimension of banks performance)	H2	0.320		
	R²		0.397		
	F		5.156		
	P		0.000[b]		
	Strategic Alignment,	H2a	-0.169	0.231	-1.213
	Management Commitment	H2b	0.183	0.236	1.200
	Change Management	H2c	-0.147	0.277	-1.101
	Customer Focus	H2d	0.384	0.006**	2.903
	BPR Project Management	H2e	0.380	0.022*	2.365
	IT Infrastructure	H2f	0.033	0.835	0.210

p* < 0.05, p** < 0.01

3. **Multiple regression analysis results and hypotheses test between BPR factors and establish justice (dimension of banks performance).**

H3 in this study were accepted when the significant value for H3 was 0.000 (p<0.05). The value of R square was 0.539 or 53.9% of variance and the F value = 9.155. Hypothesis H3 was accepted and it means that BPR able to influence banks performance in term of the establish justice. Table 4.13 showed all of the hypotheses were rejected except hypothesis H3d. Hypothesis H3d was accepted because the significant value was less than 0.05 which indicates 0.002. Furthermore, the t value of 3.291 also was more than 1.645 and the value of $\beta = 0.381$. In other words, it means that customer focus able to influence banks performance in term of establish justice.

Compare to other hypotheses such as H3a, H3b, H3c, H3e, and H3f, the hypotheses were rejected. The significant value for hypotheses H3a, H3b, H3c, H3e, and H3f = 0.861, 0.165, 0.680, 0.067, and 0.259. The hypotheses were rejected because the p value was more than 0.05. The β value for H3a, H3b, H3c, H3e, and H3f was 0.022, 0.188, -0.048, 0.263, and 0.155. Moreover, the hypotheses were rejected because t value less than 1.645 which outlines H3b (1.410), H3c (-0.416), and H3f (1.142). Although the t value of H3a (0.176) and H3e (1.874) or more than 1.645, but the significant value of these hypotheses were more than 0.05 (p<0.05). Because of this reason, the hypotheses were rejected. It can be discussed that strategic alignment, management commitment, change management, BPR project management, and IT infrastructure not able to influence banks performance in dimension of establish justice.

Table 4.13
Multiple Regression Analysis for Hypothesis 3 (N=54)

BPR factors and Islamic banks Performance	Variables	Hypotheses	Performance (β)	Sig.	*T*
Independent Variables Statistic Summary	Establish Justice (dimension of banks performance)	H3	0.480		
	R²		0.539		
	F		9.155		
	p		0.000ᵇ		
	Strategic Alignment	H3a	0.022	0.861	0.176
	Management Commitment	H3b	0.188	0.165	1.410
	Change Management	H3c	-0.048	0.680	-0.416
	Customer Focus	H3d	0.381	0.002*	3.291
	BPR Project Management	H3e	0.263	0.067	1.874
	IT Infrastructure	H3f	0.155	0.259	1.142

p* < 0.05, p** < 0.01

4. **Multiple regression analysis results and hypotheses test between BPR factors and public interest (dimension of banks performance).**

Based on Table 4.14, H4 hypothesis was accepted because the value of R square = 0.498 or 49.8 % of variance, F = 7.774, and significant value = 0.000. It means that the BPR were able to influence banks performance based on the public interest dimension. In this dimension, the hypothesis H4d for customer focus was accepted because the significant value less than 0.05 which was 0.047. Furthermore, the *t* value was 2.037 and the value of β = 0.246. It means that the customer focus able to influence banks performance in term of public interest.

Then, other hypotheses like H3a, H3b, H3c, H3e, and H3f were rejected. The significant value for hypotheses H3a, H3b, H3c, H3e, and H3f was 0.267, 0.059, 0.126, 0.164, and 0.256. The β value for hypotheses H3a, H3b, H3c, H3e, and H3f is -0.143, 0.268, 0.189, 0.208, and 0.163. The value of t should more than 1.645 to accept the hypotheses. Although the t value for hypothesis H3b (1.932) or more than 1.645 but it rejected because the significant value of this hypothesis was more than 0.05 ($p<0.05$). Due to this reason, the hypotheses were rejected. It means that the strategic alignment, management commitment, change management, BPR project management, and IT infrastructure not able to influence banks performance in term of public interest. The specific multiple regression analysis shown in Appendix 6.

Table 4.14
Multiple Regression Analysis for Hypothesis 4 (N=54)

BPR factors and Islamic banks Performance	Variables	Hypotheses	Performance (β)	Sig.	*T*
Independent Variables Statistic Summary	Public Interest (dimension of banks performance)	H4	0.434		
	R^2		0.498		
	F		7.774		
	p		0.000b		
	Strategic Alignment	H4a	-0.143	0.267	-1.124
	Management Commitment	H4b	0.268	0.059	1.932
	Change Management	H4c	0.189	0.126	1.556
	Customer Focus	H4d	0.246	0.047*	2.037
	BPR Project Management	H4e	0.208	0.164	1.415
	IT Infrastructure	H4f	0.163	0.256	1.150

p* < 0.05, p** < 0.01

4.7 Hypotheses Summary

The variation of hypotheses results can be seen in Table 4.16. Based on the multiple regression analysis result, only 11 hypotheses are accepted and have significant influence between independent variable and dependent variables. In a meanwhile, another 13 hypotheses are rejected in this study. Summary of all hypotheses are being describes in Table 4.15.

Table 4.15
Summary of All Hypotheses (N=54)

	Hypothesis Multiple Regression Analysis	Accepted (Have a significant influence)	Rejected (Did not have a significant influence)
H1	**There is an influence of BPR toward the overall performance of Islamic banking branches in Kedah.**	Accepted	
H1a	There is an influence of strategic alignment toward the overall performance of Islamic banking branches in Kedah.		Rejected
H1b	There is an influence of management commitment toward the overall performance of Islamic banking branches in Kedah.	Accepted	
H1c	There is an influence of change management toward the overall performance of Islamic banking branches in Kedah.		Rejected
H1d	There is an influence of customer focus toward the overall performance of Islamic banking branches in Kedah.	Accepted	
H1e	There is an influence of BPR project management toward the overall performance of Islamic banking branches in Kedah.	Accepted	
H1f	There is an influence of IT infrastructure toward the overall performance of Islamic banking branches in Kedah.		Rejected
H2	**There is an influence of BPR toward the performance of Islamic banking branches in terms of educating individual.**	Accepted	

H2a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of educating individual.		Rejected
H2b	There is an influence of management commitment toward the Islamic bank performance in terms of educating individual.		Rejected
H2c	There is an influence of change management toward the performance of Islamic banking branches in terms of educating individual.		Rejected
H2d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of educating individual.	Accepted	
H2e	There is an influence of BPR project management toward the performance of Islamic banking branches in terms of educating individual.	Accepted	
H2f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of educating individual.		Rejected
H3	**There is an influence of BPR toward the performance of Islamic banking branches in terms of establishing justice.**	Accepted	
H3a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of establishing justice.		Rejected
H3b	There is an influence of management commitment toward the performance of Islamic banking branches in terms of establishing justice.		Rejected
H3c	There is an influence of change management toward the performance of Islamic banking branches in terms of establishing justice.		Rejected
H3d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of establishing justice.	Accepted	
H3e	There is an influence of BPR project management to toward the performance of Islamic banking branches in terms of establishing justice.		Rejected
H3f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of establishing justice.		Rejected

H4	**There is an influence of BPR toward the performance of Islamic banking branches in terms of public interest.**	Accepted	
H4a	There is an influence of strategic alignment toward the performance of Islamic banking branches in terms of public interest.		Rejected
H4b	There is an influence of management commitment toward the performance of Islamic banking branches in terms of public interest.		Rejected
H4c	There is an influence of change management toward the performance of Islamic banking branches in terms of public interest.		Rejected
H4d	There is an influence of customer focus toward the performance of Islamic banking branches in terms of public interest.	Accepted	
H4e	There is an influence of BPR project management toward the performance of Islamic banking branches in terms of public interest.		Rejected
H4f	There is an influence of IT infrastructure toward the performance of Islamic banking branches in terms of public interest.		Rejected

4.8   The Discussion of Hypotheses Result

The discussion of hypotheses results are classified into two parts of hypotheses whether the hypotheses is accepted or rejected based on the 28 hypotheses. The discussion parts are involving conclusion from researcher and supported by previous studies.

1.BPR factors and overall performance of Islamic banking branches in Kedah

The hypothesis 1 were accepted and it shows the significant relationship between BPR toward the overall performance of Islamic banking. According to Khong and Richardson, (2003); He (2005); Ahmad, Francis, and Zairi, (2007); Cheng and Chiu, (2008); Ringim, Razalli, and Hasnan, (2011), BPR have a significant relationship with organization

performance. It also supported by Setegn, Ensermu, and Moorthy (2013) that the implementation BPR approach in organization will give biggest benefit and achieve the dramatic improvement (Sidikat, & Ayanda, 2008). Hanafizadeh and Osouli (2011) also agreed that most of the researchers indicate that the BPR was the best approach for continuous improvement for organization performance. This study indicates that the BPR were able to influence the performance of Islamic banking branches. In relation with overall banks performance, this study found that only three BPR factors were significant with banks performance such as management commitment, customer focus, and BPR project management. However, the other factors like strategic alignment, change management, and IT infrastructure are not significant and unable to influence the overall performance of Islamic banks.

Al-Mashari and Zairi (1999); Ringim, Razalli, and Hasnan (2012) emphasized that there were significant relationship between management commitment and banking performance. The significant relationship explains that the higher management commitment were increased the banks performance. The significant management commitment was proved based on findings result by Cheng and Chiu (2008); Ringim, Razalli, and Hasnan, (2012). Effective in management commitment toward the management teams of bank will influence the performance and managerial practices directly will affect the organizational success (Guimaraes & Bond, 1996). In other words, the commitment from top management will ensure that all of the employees to doing better and improve the banks performance.

Based on Cheng and Chiu (2008), the regression analysis shows that the customer focus was significant relationship with banks performance. They also suggested to all

banking manager to focus on voice of customer and adding value to banking customer. Furthermore, Cheng and Chiu (2008) mentioned that customer focus a key to drive changes. Hammer and Champy (1993) also argued that customer focus was essential to lead a transformation in organization. Based on this study, the findings demonstrate that the customer focus directly influence the performance of Islamic banking branches in Kedah. Idris (2011) described that the evaluation of market needs and customer research was very important to improve organizational performance. Akamavi (2005) also believed that banking industry should improve their service toward their customer to be market leader. Wei and Nair (2006) also suggested that banking and financial industry in Malaysia should emphasize the importance of customer relationship management to gain brilliant performance. Successful implementation of BPR depends on BPR project itself (Al-Mashari & Zairi, 2000). BPR project management has significant relationship with overall performance in this study. BPR project management is important for manufacturing industry. Nevertheless, based on regression analysis of Cheng and Chiu (2008), they found that the relationship between BPR project and banks performance is insignificant.

According to Cheng and Chiu (2008), they highlighted that strategic alignment is appeared as a little concern for practitioners. Ringim, Razalli, and Hasnan (2012) also found that there no significant relationship between strategic alignment and bank performance. Change management includes communication, motivation, empowerment, training, reward, and education in which all of these items do not influence the overall banks performance. According to Ringim, Razalli, and Hasnan (2012), insignificant relationship between change management and bank performance. Cheng and Chiu (2008); Storey and Westhead (1994) also have been conducted the study to examine the

relationship between change management such as training and development to enhance performance. Unfortunately, the result shows that there is no relationship between change management and organizational performance. In this study, the researcher found that IT infrastructure is not able to influence the performance of banks. Referring to Cheng and Chiu (2008); Jarrar and Aspinwall (1999), the previous study shows that only 30% of the organizations do not admit that IT application is the key success factor and BPR project is not only depending on IT to gain success. They also added that organization performance still have possibilities to be achieved without involving the role of technology in organization. Besides that, Sekaran and Bougie (2013) also highlighted that the insignificant relationship between these variables are because of weak inter-correlation value between both variables as evidenced in Table 4.10.

2.BPR factors and performance of Islamic banking branches in terms of educating individual

Hypothesis 2 shows significant relationship with performance of Islamic banking branches in terms of educating individual. It means that the overall BPR are able to influence the banking performance in terms of educating individual. The findings from six BPR factors show that only customer focus and BPR project management are having significant relationship with banks performance in term of educating individual. The other factor such as strategic alignment, management commitment, change management, and IT infrastructure demonstrates insignificant relationship with educating individual. Educating individual is defined as advancement knowledge, instilling a new skills and improvements, and creates awareness of Islamic banking.

Different organizations have a different key success factor (Ringim, Razalli, & Hasnan, 2012). The differentiations between organizations drive the banking industry to be unfocused to provide education toward individuals but they are only more focusing to increase the level of profitability. Morrison, Ghose, Dam, Hinge, and Hoesch-Klohe (2011) also clarify that the strategic alignment is a method to understand the relationship between process and strategy. On the other hand, the educating individual in this study is more focusing on giving education, community service relation, scholarship, publicity, and advertisement about Islamic banking. The differentiation strategy and key success factors between banks and other organization have led to the insignificant results in this review. Furthermore, IT infrastructures are insignificant because of the IT strategy which is not in line with education individual strategy. When organization has failed to integrate IT strategies with other strategy, it will cause the failure in organization to improve the performance (Drew, 1996). Top management is responsible to all of transactions about financial, strategy, and other things which depend on their decisions (Habib, 2013). Lack of commitment from management also becomes the factor of insignificant relationship because top management is failed to make a wise decision especially in terms of community service relation, scholarship, and publicity to improve education for individuals. Herzog, Polajnar, and Tonchia (2007) also supported that management should alert and aware in all activity occurred in the organization.

Then, the significant relationship with educating individual is customer focus and BPR project management. Customer focus has significant relationship with education individual because the dissemination of knowledge is one of the important approaches to enhance skills and abilities of individuals. By providing the best education and training

for individuals, the organization is able to evaluate whether the customer is satisfy or not with their services (Idris, 2011). Moreover, the other efforts by the banking sectors such as scholarship financing, funding, and budget for a new research are important as value-added to the organization to be more closed with customer. That is the reason of why the findings show the significant relationship between customer focus and educating individual.

Additionally, organization should provide clear vision to improve performance (Al-Mashari & Zairi, 1999). A clear vision and target likes giving initiative and scholarship to the individuals will help organization to manage effectively in every activity and efforts. Every strategy or planning must have a clear guidelines and benchmarks to be followed (Ringim, Razalli, & Hasnan, 2011). This matter is further strengthened in which BPR project management is a process or activity that based on the requirement from customer (Herzog, Polajnar, and Tonchia, 2007). It means that the requirement from individuals to reach for scholarship or advertisement create a power to restructure the BPR project. That is the reason of why the analysis of the result shows the significant relationship between BPR project management with educating individual.

Besides, this situation probably exists from the global competition and issues that faced by banking industry nowadays. Sekaran and Bougie (2013) also highlighted that the insignificant relationship between variables is caused from a weak inter-correlation value between both variable. Due to this reason, the researcher can conclude that there is no relationship between these both variables.

3. BPR factors and performance of Islamic banking branches in terms of establishing justice

Hypothesis 3 indicates significant relationship with performance of Islamic banking branches in terms of establish justice. It means that the overall BPR are able to influence the banking performance in terms of establish justice. The finding from six BPR factors, only customer focus has significant relationship with banks performance in term of establish justice. The other factors such as strategic alignment, management commitment, change management, BPR project management, and IT infrastructure show insignificant relationship with establish justice. Establish justice in term of banks performance is defines as fairness about returns, elimination of negative elements that cause injustices and not reasonable price for products and services (Mohammed, Razak, and Taib, 2008).

Customer focus has significant relationship with establish justice due to the meaning of establish justice to be fairness, avoid any negative element, and giving the reasonable price for product and service. It means that all of the activity in customer focus is able to meet the customer desire and requirement (Cheng & Chiu, 2008). Bhatt (2000); Salimifard, Abbaszadeh, and Ghorbanpur (2010) also emphasized that the organization should produce services and products to their customers based on their requirement and preferences. So, it is evidence that the relationship between customers focus and establish justice is very strong.

The other factors like strategic alignment, management commitment, change management, BPR project management, and IT infrastructure have insignificant relationship with establish justice. For a clear indication, different executives have a different approach about this concept and have a different goal (Kamhawi, 2008).

Different goals and visions are unable for organization to give the potential benefit and right ways (Salimifard, Abbaszadeh, & Ghorbanpur, 2010) to their stakeholder and employees. Lack of involvement by employers and employees is one of the factors which lead to prove insignificant relationship between management commitments with establish justice. Involvement from top management will increase the establish justice in term of activity and task (Guo, 2004). The relationship of BPR project management with establishes justice also become insignificant because the organization is only implementing BPR project in a short-term period (Habib, 2013). Most of the Islamic banks branches are newly entered in the marketplace and still fresh in producing the products and services especially for Islamic window of conventional banks. Short-term period also can be a critical factor which has a possibility to cause failed to implement any transaction such as Al-Wadi'ah and Musyarakah investment. This matter is also being supported by Terziovski, Fitzpatrick, and O'Neill (2003) when the result indicates the insignificant relationship with performance of the banking industry.

Afterwards, the increase cost of equipment, training and development program, and recruit or hire activity can be a factor of insignificant of BPR factors with banks performance (Ringim, Razalli, & Hasnan, 2012). Cheng and Chiu (2008) also mentioned that the organization performance still can be gained without involving technology. In order to establish justice to their stakeholder, customers or employees should not only depend on their IT infrastructure. Previous studies found that IT infrastructure has no significant relationship with establish justice. This situation also occurs because of global competition and issues that have been faced by banking industry. Sekaran and Bougie

(2013) also claimed that the insignificant relationship between variables due to weak inter-correlation values between both variables.

4. BPR factors and performance of Islamic banking branches in terms of public interest

Hypothesis 4 has significant relationship between BPR with performance of Islamic banking in terms of public interest. Based on the finding from six BPR factors, only customer focus has significant relationship with banking performance in terms of public interest. The other factors such as strategic alignment, management commitment, change management, BPR project management, and IT infrastructure show insignificant relationship with public interest. Public interest can be classified as profitability of bank, redistribution of income and wealth, and investment in vital economic sectors. Customer focus shows the significant relationship with public interest. The significant relationship between these both variables is because of all of the items in the measurement factors of BPR is related to the customer and provides more stakes towards the public such as giving zakkah, annual contribution for community service, and so forth. This closed relationship with customer proved the significant relationship between these both variables in this study.

Moreover, the insignificant relationship describes that strategic alignment, management commitment, change management, BPR project management, and IT infrastructure are not able to influence the performance of banks based on public interest. Al-Mashari and Zairi (1999) reported that any problem in change management especially in communication, lack of motivation and initiative, poor linked between expertise in BPR program, lack of job security, and underestimates the importance of BPR roles probably

become the major failure factor to achieve better performance. According to Wu (2002); Ringim, Razalli, and Hasnan, (2012); Fan, Md. Salah, and Md. Shariful (2012), they argued that lack of proper strategy and poor of experience to connect BPR strategy with organizational strategy will be the main factor of failure. It means that the organization needs to provide the proper strategy to gain success of BPR implementation. Referring to Cheng and Chiu (2008), insignificant relationship between BPR project management and performance in banking sector is because the management teams of banks consider that BPR project is only act as basic tools and not much contribute to the development of organizational performance.

It is clearly shows that apart from the independent variables in this study, the other factors probably become an essential factor with organizational performance (Coakes & Steed, 2007). The situation is probably due to global competition and current issues that have been faced by banking industry. Sekaran and Bougie (2013) also highlighted that the insignificant relationship between variables is because of weak inter-correlation values between both variables.

4.9 Summary

In this chapter, the researcher discussed about hypotheses that have been tested to analyze the relationship of variables in this study. The research results also indicate that there is significant influence of BPR factors towards Islamic banking performance in Kedah branches. The research also identified that the influences between independent and dependent variables which are in line with the research objective of 1, 2, 3, and 4. The data analysis is completely performed by using the multiple regression analysis.

Multiple regression analysis found that 11 from 28 hypotheses are positively significant. It means that dependent variables are able to influence the dependent variables. The BPR factors, management commitment, customer focus, and BPR project management have a significant relationship with overall performance of Islamic banking branches in Kedah. For the dimension of banking performance in term of educating individual, only BPR factors, customer focus, and BPR project management possess a significant relationship with educating individual. Then, it proved that only BPR factors and customer focus are able to influence the performance of Islamic banking branches in Kedah in term of establish justice and public interest.

In conclusion, overall BPR factors, management commitment, customer focus, and BPR project management are able to influence performance of Islamic banking branches in Kedah. The implementation of BPR on Islamic banking branches will give a biggest benefit to enhance their performance. Based on the research finding, manager of Islamic banking branches in Kedah should focus on management commitment, customer focus, and BPR project management in order to improve performance effectively.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1   Introduction

This chapter focuses on the conclusion and recommendations of this study. In this chapter, the researcher would provide the implications of this study into two dimensions which includes academic and practical implication. Furthermore, the researcher also provides a limitation of the study and provides suggestion for future research. The conclusion of the study is based on the results from data analysis.

Research implications for this review are divided into two sections include practical implication and academic implication. The researcher also provides recommendation for this study which is based on researcher's opinion and suggestion from banking sector representative. Afterwards, the researcher also provides suggestion for further study and the limitation during the progress of the research. Suggestion for the future researcher especially the topic that related with this study will enhance the value BPR in academic field and it is believe that BPR is able to contribute to the performance of organization.

5.2   Research Implication

This study is important to demonstrate several important things and implication for both managerial and academician is needed to be considered. The research implication is also giving a recommendation and it will divide into two categories namely practical implication and academic implication.

5.2.1   Practical Implication

Based on the research finding, the researcher demonstrates some efforts and attentions from managerial of Islamic banking branches in Kedah. Top management level in banking sector should develop several things to ensure continuous improvement for the banks' benefit. The research findings show that management commitment, customer focus and BPR project management are able to influence overall Islamic banking performance. It shows that any changes of management commitment, customer focus and BPR project management will affect the performance of Islamic banking branches.

In order to improve the performance of Islamic banking branches, management teams of banks should increase the level of commitment from top management because all planning and activity in company is based on management decision (Habib, 2013). On the other hand, top management also must align BPR project with work process skill requirement and performance measurement to gain success (Guo, 2004). In addition, Campbell and Kleiner (2001) describes that manager should have a clear vision, responsibility and commitment with work, manage personal purpose, and attitude and alert with all activity (Herzog, Polajnar, & Tonchia, 2007).

Customer focus is depending on customer relationship management (CRM). Feedback from customer is vital to the banking institution and banking will utilize the feedback from customer to provide a good delivery service of information and value-added to meet customer demand. Wei and Nair (2006) argued that banking and financial institution in Malaysia needs to implement customer service management to gain brilliant performance. It means that, organization should to evaluate market needs and customer trends research to their respective customer in order to improve organization performance (Idris, 2011). Organization will achieve competitive advantage when firms are able to meet the customer requirement (Cheng & Chiu, 2008) because every customer desires a good service from the business parties. Management teams of banks should to improve customer focus because in order to sustain the performance as a market leader, banking industry must increase the quality of customer service and customer focus (Akamavi, 2005; Ringim, Razalli, & Hasnan, 2012). Additionally, a long-term customer relationship also effectively can lead to customer loyalty to the brands of banks because this bilateral relationship provides assistance for the banks to reach competitive advantages.

Successful implementation of BPR is depends on the BPR project itself (Al-Mashari & Zairi, 2000). Training and gain knowledge is significant part to improve skills because employees are encourage to attend the training to learn skills about BPR from experts or consultants as the proper training (Ahmad, Francis, & Zairi, 2007; Salimifard, Abbaszadeh, & Ghorbanpur, 2010). Every employee must have a power to organize and implement BPR if the organization is expected to gain successful performance (Setegn, Ensermu, & Moorthy, 2013). It means that the banking management should provide a good training and knowledge sharing to improve skill and performance of banks. The right

guideline will drive the organization to do the right activities at the right time and place (Khong & Richardson, 2003).

Next, banking management should have a proper strategy to align all strategy in organization and ensure all of the customers are satisfied with banks service. Manager also should to emphasize the right guideline to perform better and use expert teams or external consultants to give advice in term of BPR implementation. By doing the right thing, the researcher believes that the performance of Islamic banking branches in Kedah will be developed and succeed.

5.2.2 Academic Implication

In general, this research is able to contribute for the knowledge enhancement and provide principal value to the academician about BPR on Islamic banking branches. Nowadays, knowledge is becoming meaningful resource in the world. This research is very interesting and able to improve understanding and gain experience about BPR on Islamic banking branches. In this study, the researcher found the empirical evidence in applying resources-based view (RBV) as an underpinning theory. This study shows that internal resources (BPR factors) are able to influence the performance of Islamic banking branches in Kedah. BPR factors are known as internal resources for organization. Internal resources in this study are strategic alignment, management commitment, change management, customer focus, BPR project management, and IT infrastructure. This findings show that management commitment, customer focus and BPR project management are able to influence the overall performance of Islamic banking branches in Kedah. For the specific explanation, customer focus and BPR project management are able to influence banking

performance in term of educating individual, and only customer focus is able to influence the banking performance in term of establish justice and public interest. The other factors such as strategic alignment, change management, and IT infrastructure are not able to influence performance of Islamic banking branches in Kedah. The reasons of failure can be a result from lack of management commitment, lack of IT investment, poor alignment between strategies, no clear concept of a process, unrealistic objective, lack of communication, resistance to change, lack of involvement and non-effective reward systems.

Furthermore, measurement performance for this study is based on Maqasid al-Shariah which includes educating individual, establish justice, and public interest as the dimensions of measurement (Mohammed, Razak, & Taib, 2008). This study is not only provide the significant evidence of relationship between BPR factors and overall performance, but it is also provide an evidence with other three dimension of performance such as educating the individuals, establishing justice and public interest. The results prove that the overall relationship of BPR factors with banking performance is positive correlation.

Apparently, the academic field also coupled with the latest knowledge collection of BPR research and this contribution in undeniable. The study also significantly will be used as a guideline and sources of literature about the linked between BPR and performance of Islamic banking. The researcher believes and hopes that this research will provide assistance to the readers to improve their understanding, knowledge, and attract readers to be the next researchers for further studies in BPR field.

5.3 Recommendations from the Research

In this section, the researcher and representative from banking sector provides an opinion about implementation of BPR on Islamic banking branches in Kedah. This section is classified into recommendation from researcher and recommendation from management representative of Islamic banking branches in Kedah.

5.3.1 Recommendation from the Researcher

Firstly, top management of Islamic banking branches in Kedah should to committed on the jobs and responsible in all activity. Banking management also often initiates BPR project (management needs to focus on three criteria such as money, resource, and leadership in order to change capability and skill of employees) and willing to accept and implement a recommendation from BPR teams.

Secondly, customer focus has a big opportunity to build a long-term relationship and loyalty with clients, and organization should provide the superior service to their staff and encourage them to build personal relation. The evaluation of market needs and customer research is crucial to improve organization performance. Organizational also should to empower their staff to solve any problems if customers request for unexpected things or events. Feedback from customer will be used as guideline to improve performance.

Thirdly, the researcher suggests to all managerial banking teams to sets a clear vision and objective of banks. Manager also should to understand about anything occurred and capable to make a drastic decision. It is important for organization to maximize the advantages of expert teams and external consultation to gain advice about BPR project.

5.3.2 Recommendation from the Representative of Banking Sector

In order to obtain suggestion or recommendation from the respondents, researcher provides an opportunity to the respondents to express their opinion and recommendation due to this topic. Respondents are willing to give recommendation from their experience and knowledge of BPR issues and approach.

Firstly, BPR implementation is clearly could drive banks to achieve target for the future improvement. It means that the implementation of BPR approach in banking sector will help them to achieve continuous improvement towards the banks objectives and goals. Besides that, the banking management parties also suggested that the dissemination of BPR knowledge and information is needed to be concerned. Banking industry should create a good understanding and execution of the BPR approach towards all entire branches of banking firms.

5.4 Limitation of the Research

For this study, several limitations have been pointed out by the researcher. The limitation of the study includes:

1. The study is only focusing on Islamic banking in Kedah. The sample size is small and limited, so this study is unable to represent all of the Islamic banking in Malaysia because it only focuses on Islamic banking branches in Kedah.

2. For the next limitation, this study requires a representative or single person in answering the questionnaires. Due to the single person or representative to represent their banking firms, the result maybe bias to its own perception and affect the answer of questionnaires. The respondents also probably being a subject for

other factors such as pressure from management team to feedback either negative or positive and the level of sincerity to answer the questions.

3. Third limitation is researcher only adapted one model of BPR factors from Cheng and Chui (2008). But there are still a lot variables or elements of BPR which are able to influence performance of Islamic banking branches in Kedah such as process redesign, financial resource, less bureaucratic structure, quality management system, and so forth. There are many scholars or experts that established the model of BPR factors such as Ahmad, Francis, & Zairi (2007); Salimifard, Abbaszadeh, & Ghorbanpur, (2010); and Ringim, Razalli, and Hasnan, (2011).

4. Lastly, the limitation of this study is time constraint. The researcher only provided 5 month to complete this task and submit this research paper. The progress of research paper requires a longer time to ensure quality of the research.

5.5   Suggestion for Future Research

There are a lot of investigations about BPR factors on organizational performance but the review of BPR factors on banking sectors is still lack in the academic review especially the performance of Islamic banking. Lack of literature in this area becomes a big problem and gap to the practitioners and academician. On the other hand, based on the observation by the researcher, it is found that the research about relationship of BPR and performance of Islamic banking is still new and almost no study has done before. Thus, it is possible that this topic will be an interesting to discuss on the future.

The role of single person as respondents to represent their organization can lead to bias in this research. In parallel with other researchers' opinion (Sung, & Gibson, 1998; Cheng & Chiu, 2008; Ringim, Razalli, & Hasnan 2012; Ringim, Osman, Hasnan, & Razalli 2013), they are suggested to select multiple respondents to avoid bias, balanced the perspective of BPR variables, and concern with negative or positive feeling about the research topic (Cheng & Chiu, 2008).

The present study shows that the researcher has to analyze information based on quantitative techniques because of small samples. Therefore, the researcher suggests that the future researcher should apply mix-mode study. The results from the study by using both quantitative and qualitative techniques (mix-mode) are more meaningful and giving the best answer to show relationship between BPR and performance of Islamic banking.

Future researchers are encourages to examine another factors or elements such as process redesign, financial resource, less bureaucratic structure, quality management system and so on (Ahmad, Francis, & Zairi, 2007; Salimifard, Abbaszadeh, & Ghorbanpur, 2010; and Ringim, Razalli, & Hasnan, 2011) to improve the level of understanding about BPR. The future researchers are also able to use IT capability as moderating variable between BPR factors and Islamic banking performance (Ringim, Razalli, & Hasnan, 2011)

Moreover, the future researchers are also able to involve in Islamic finance companies because this research is only focusing on full-fledged Islamic banking and Islamic window of conventional bank. By involving Islamic finance companies, the total number of population also will increase. The future researchers also have been suggested

to investigate the relationship between BPR factors and Islamic banking in Malaysia in order to gain more population and reach wide knowledge from large population.

Hence, the results from this study are expected to be used to enhance knowledge and gain better understanding about BPR approach and implementation. Obviously, this topic of BPR provide an opportunity for the future researchers to have views and outlook for further review in term of long-term implications of BPR, the failure factors, advantage and disadvantage, methods for BPR application, and examine the effectiveness of the BPR implementation.

5.6   Conclusion

The purpose of this research is to investigate the relationship between Business Process Re-Engineering (BPR) and performance of Islamic banking branches in Kedah. The population and sample in this study is branch manager and executive level which possess an understanding of BPR knowledge and BPR implementation. The setting for this study is on Islamic banking branches in Kedah. The total questionnaires for this analysis are 54 sets.

The overall result shows that the BPR factors are able to influence overall performance of Islamic banking branches and the others three (3) dimensions of performance (educating the individuals, establishing justice and public interest). However, for individually, the analysis using multiple regression analysis indicates that only management commitment, customer focus, and BPR project management are able to influence overall performance of Islamic banking branches. In term of dimension of

banking performance, only customer focus and BPR project management are influencing the dimension of educating the individuals. Meanwhile, for the dimension of establishing justice and public interest, only customer focus is able to influence that dimension.

Finally, the research model has been developed in which the key variables in this study are BPR factors and performance of Islamic banking branches. The researcher suggested to the entire banking manager to be more focuses on management commitment, customer focus, and BPR project management in order to enhance banking performance. The study also provides new empirical study about the implementation of BPR factors towards the performance of Islamic banking branches in Kedah. Henceforth, the researcher hopes that this study will provide assistance to other potential future researchers to extend and explore exhaustively of this topic area.

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