THE ROLE OF MARKETING INFORMATION SYSTEM (MkIS) TO IMPROVE PERFORMANCE IN THE BANKING SECTOR OF JORDAN

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By

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Declaration

I declare that all the work described in this dissertation was undertaken by myself (unless otherwise acknowledged in the text) and that none of the work has been previously submitted for any academic degree. All sources of quoted information have been acknowledged through references.

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ABSTRACT

The banking sector has always been high information intensive over the years. This has brought the use of Information technology (IT) as a necessity for data storage, modification and retrieval. Information systems (IS) use the provided infrastructure of IT to leverage advantages of IT and to solve many issues that relates to information acquisition. To these end most financial institutions has been using different types of information systems to gain competitive advantage. One of such system is the Marketing information system (MkIS). The purpose of this study is to explore the role of MkIS in the performance of banking sector in Jordan, an emerging modern Arab economy in the Middle East. The present study modifies the technology acceptance model and the organization effectiveness (organization theory) and applies it to usage of MkIS in the Jordanian banks.

With the use of MkIS, banks can make notable savings, increase their customer base, increase sales growth and effectively acquire market and customer information. The availability of this information will assist the banks to improve customer service and invariable win the trust of customers and increase customers' patronage. Quite a number of the banks in Jordan make use of information system. But there is no empirical study yet on the use of MkIS in Jordan, neither are there literatures on the role to which MkIS to the performance of the banks. Therefore, a combination of TAM model and organization effectiveness models were used to investigate the influence of MkIS on bank performance. The result of this study which stands as contribution, as it was revealed that there are positive relations to bank performance as hypothesized. The positive association between combination among all independent variables (ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge and market responsiveness) were supported.

Keywords: marketing information system, bank performance, Jordan bank.

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All thanks be to **ALLAH** for His blessings and favor in completing this study, we humbly ask Allah to grant us the proper intention, the comprehension, and the reward in the hereafter.

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الأهداء

الحمدلله عز وجل على نعمه وفضله علي في استكمال مرحلة دراسة الماجستير، وأسأل الله العلي القدير ان يحتسب ما أكتسبه من علم لوجه الله تعالى وان يرزقنا الثواب في الآخرة.

في البداية أود أن أعرب عن خالص امتناني للمشرف البروفسور الدكتور اسماعيل عثمان لأشرافة على رسالة الماجستير وما قدمة لي من عون ومساعدة وتقديم المشوره خلال فترة كتابة الرسالة. بالفعل كان لي مصدراً للألهام والتحفيز والتشجيع، وما اكتسبتة منه من كيفية استغلال الوقت ،احترام، ودقة المواعيد. أنا حقا أشعر بالأمتنان لدعمه المستمر وتعاونه معي وبدونه لم استطتع من أنهاء هذه الرسالة واظهارها على حيز الوجود.

وأود ايضا ان اتقدم بجزيل الشكر والعرفان الى البرفسورة الدكتورة نور ازيله لمساعدتها وتقييمها لرسالتي.

تعجز الكلمات عن مدى أعرابي وتقديري وامتناني لوالدي العزيز الأستاذ عيسى غافل الخوالده والوالده الغاليه لانهما يستحقان مني جزيل الشكر والعرفان لما قدموه لي من دعم وتشجيع ومنحي ثقتهم وفرصة اكمال دراستي. وبفضل دعائهم ورضاهم وصلت الى ما أنا علية الان.

كلمة شكر لا تكفي للتعبير عن صدق مشاعري ومدى امتناني وتقديري للأخوه الأعزاء م.عبد القاهر، م. رائد، م. منير، م. وليد، محمد، غسان، عمر، نشأت، وأختي وزوجها م. محمد لكل الحب والدعم والثقة، والتشجيع الذي قدموه لي خلال مرحلة الدراسة.

وأود أن أتقدم بجزيل الشكر والعرفان الى عايد المعلا على ما قدمه لي من مساعدة وحرصه الشديد على دراستي واتمنى له النجاح كونه في مرحلة تسليم أطروحة الدكتوراة.

وأخيراً، أشكر كل الأصدقاء والمحبين الذين قدمو دعمهم خلال فترة الدراسة، واقدم اعتذاري لهم لعدم ذكرهم شخصيا.

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CHAPTER ONE

INTRODUCTION

1. PREAMBLE

The credit system has undergone a process of reformation and restructuring, this include the organization and the orientation level. The banking system has been taking active part in this procedure. The innovation of policies, mergers and acquisitions, changes in organizational structures, globalization of products and services phenomena are some of the examples present on the changes in the banking industry globally. Banks performs functions and duties that are very crucial to a countries economical growth and development. The banking services have metamorphosed from an early emphasis primarily demand deposits and savings accounts and short term loans into a much wider range of deposit and loan services. In order to operate in dynamic environments, it is of importance for banks to intensify their approaches towards services qualities and innovative marketing strategies in an attempt to increase sales volume, market share and ultimately their profits. One of the strategies that that has been notices for

success is the delivery of high service quality through the use of Information System. There are quite a number of information systems that could be adopted for use in order to satisfy customer. But the information system that assist in making the clientele and prospective customers to be fully are of the banking services is through the use of the Marketing Information System.

Harmon, (2003) defined Marketing Information system (MKIS) is a system that is programmed with the ability to give an organized flow of information to maintain the marketing activities of an organization. It is important to note that as banking clientele has become more financially sophisticated, so have bank operations have expanded from traditional commercial banking services to investment services, fund management services, insurance brokerage and other financial services. Therefore the use of technological developments such as the use of computers and especially the Internet and the World Wide Web and banking software and applications can facilitate these banking operations. The Internet and all its derivatives has created lots of opportunities for financial institutions, the strong on-line presence is becoming a strategic necessity for most banking services, therefore the use of Information systems becomes crucial for the distribution channel for providing, maintaining and updating banking services. According to Amaratunga(2003), there has been a considerable growth in the segment of consumers preferring Internet banking due to the increase in computer literacy. This makes the marketing section of the banks to rely on the use of MKIS to successfully perform its obligatory functions to the bank. Therefore the need to identify the roles of the MKIS in the performance of the banking sector.

1.2 PROBLEM STATEMENT

The use of information system in making managerial decisions is now common with most organizations that want to make a meaningful impact in the market while satisfying their customers. In the recent years, there have been substantial changes in the Jordanian banking sector and it is the advancement in computing and telecommunication that has actually brought about these changes. Many banks use quite a number of information systems as online services are now provided as it is practiced in Europe (Jun &Cai, 2001). The MIkS is one the information system used by the marketing section of the banks make crucial decisions on their products and services for their customers. But there are no available empirical studies on the role of MIkS in the Jordanian banking sector.

The theory antecedents and consequences of market orientations have its effects on the performance of the business performance (Narver& Slayer, 2000). These market orientations are properly monitored and documented by the Market information systems that are adopted by the banks. The banking sector in the Jordan has come of age, while there has been diverse transformation, such as merger and acquisition of the banks. The banks have also evolved through many developmental phases to improve the performance of their services. Many banks uses several information system to improve their service, one of the information system is the Marketing information systems (MKIS). There has not been empirical publication on the role of the MKIS in the performance of the banking operations in Jordan. Also, there are no available literatures on the performance of the MkIS on marketing performance in the Jordan banking sector.

Therefore the need for this study to investigate the roles the MKIS has played in improving the marketing performance in the banking sectors.

1.3 RESEARCH QUESTIONS

The following is the research question that we intend to answer in through the investigations in this study:

1. What is the relationship between Ease of use and attitude?
2. What is the relationship between Usefulness and attitude?
3. What is the relationship between attitude and bank performance?
4. What is the relationship between Market procedural improvements and bank performance?
5. What is the relationship between Employee Support and bank performance?
6. What is the relationship between Customer knowledge and bank performance?
7. What is the relationship between market Responsiveness and bank performance?

1.4 OBJECTIVES

The main objective of this study is to investigate the role that Marketing Information systems plays in the performance of the banking sector in Jordan. This objective shall be achieved through the following sub objectives:

1. To determine the relationship between Ease of use and attitude.
2. To determine the relationship between Usefulness and attitude.
3. To determine the relationship between attitude and bank performance.
4. To determine the market procedural improvements and bank performance.
5. To determine the employee Support and bank performance.
6. To determine the customer knowledge and bank performance.
7. To determine the market Responsiveness and bank performance.

1.5 HYPOTHESIS

The following are the hypothesis that we intend investigate in this study:

- H1: There is a positive relationship between Attitude and bank performance.
- H2: There is a positive relationship between ease of use and attitude.
- H3: There is a positive relationship between Usefulness and attitude.
- H4: There is a positive relationship between market procedural improvements and bank performance
- H5: There is a positive relationship between employee Support and bank performance
- H6: There is a positive relationship between customer knowledge and bank performance
- H7: There is a positive relationship between market Responsiveness and bank performance.

1.6 SCOPE OF STUDY

The framework of this research targets (150) bank marketing managers in Jordan banks during 2009/2010, with an attempt to measure the banking performance. The measurement based on the perceptions of bank marketing managers in Jordan. This study will examine the bank marketing managers who are working at Jordanian banks in Jordan. In addition, this study chose all population (banks' managers) of the study in Jordan banks.

1.7 SIGNIFICANCE OF STUDY.

The use of Information Technology as a platform to improve business performance has been on the increase in the business world, the banking sector inclusive. This study will investigate ways to which marketing information systems MkIS improves marketing performance in the banking sector of Jordan. The study shall also assist banking marketers and the bank management to make a good use of the information system in their organization.

The outcome of the study can also be used by individual bank market that wants to know what role the MIkS takes in making it possible for him to increase his efficiency by using the system to reach out to his or her clients by meeting their needs and wants with the services provided by the bank.

The academia and the Jordanian banking sector shall be able to make a good use of the results from this study. Furthermore, the outcome of this study will add to the empirical academic research which is limited on the Jordanian banking sector.

1.8 OUTLINE OF THE THESIS

This research report consists of five chapters. This chapter has given a detail account of the need for this study, the objectives, scope and significance of the study. The second chapter presents the past works (literature review) in this subject area. Chapter three presents the methodology that was adopted in this study. Chapter four discusses the findings and results from the study while chapter five concludes the documentation of the study, with the contribution of the study and recommendation for future work. Figure 1.1 below gives a diagrammatic expression of the study.

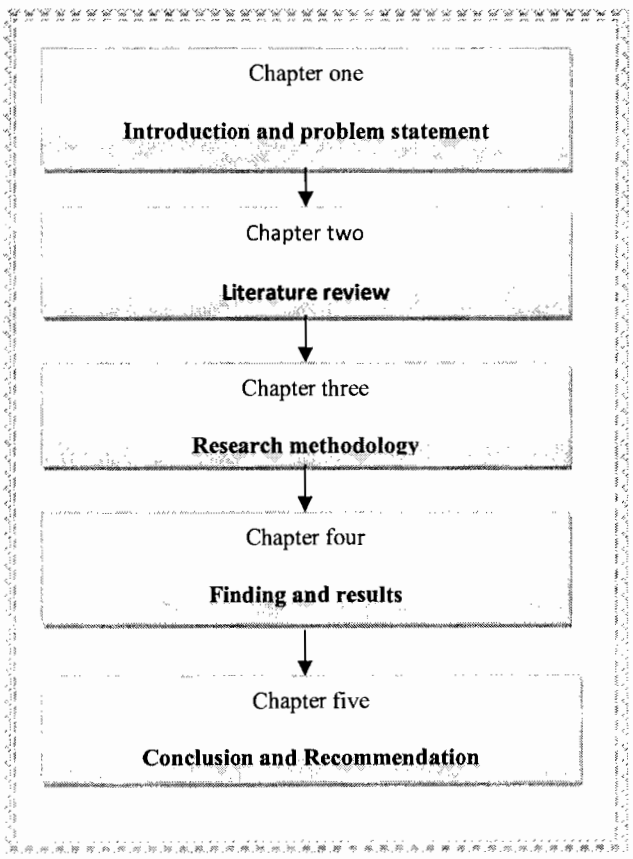

Figure: 1.1 Outline of Thesis

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The effect of MkIS in organizations was given little empirical treatment until Quinn &Rohrbaugh (1983). Researchers like Sääksjärvi et al (1992) and Gounaris et al (2007) further worked on the theoreatical foundation that was initially laid by Quinn et al (1983). In as much as all these contributions are of paramount importance, the market concept shall be discussed first. The studies of the MkIS and its relation to the banks performance shall be reviewed to build the theoretical framework of this study.

2.1.1 Marketing concept

The marketing concept has been widely debated as the outcome of the implementation of marketing philosophy. Peter Drucker spoke about the marketing philosophy as far back as the year 1954. Felton (1959), Mackiterick (1957) and Levitt (1960) immensely contributed to the concept. A precise definition given to marketing concept by McNamara (1972) is "a philosophy of business management, based upon a wide acceptance of the need for customer orientation, profit orientation and recognition of the important role of marketing in communicating the needs of the market to all major corporate departments".

2.1.2 Effect of MkIS on the banks

The increase in technological evolution, internalization and the consumerism of completion are some of the conditions in the market that increases the competitive intensity levels. Avlonitis&Gounaris (1999) stated that dealing with such challenges require companies turns to be adaptive to their respective market environment. In order to deal with achieve this objective; Information Technology based marketing information systems are very resourceful towards this direction (Talvinen, 1995). Hosten (1996) further went ahead to define marketing concept as an expression that organizations appreciate the importance of consumers buying and selling.

The marketing concept and the related concept have been of important components of the marketing academic and practice for quite some time. The fundamental importance attributed to this concept has triggered numerous projects while attempting to explore its application and relationship with other variance that affects business performance (Slater and Naver 2000).

The marketing management has certainly played an important role to describe the most widely accepted view of the marketing philosophy and guidance for the implementation of the concept (Kotler 1994). The implication of the statement above by Kotler is that the concept hinges on four pillars namely target market, consumer needs, co-ordinate marketing and the profitability. This view has been a guide to Narver and Slater (1994) conceptual model of market orientation.

2.1.3 Internal dimensions of MkIS effectiveness

The important benefit an organization that uses the MkIS is the high improvement in the reporting system. As a result of the information system processing of the raw data collected, the system becomes faster. When employees query the system for data analysis, information retrieval becomes even faster. Therefore organization's management is able to relate important information promptly from different sources within an organization (Van Bruggen et al., 2001).

Without information system as intelligent as MkIS vital information needed by companies will be almost impossible to integrate all pieces of information without the proper information system infrastructure. It is also important to note that the main function of MkIS applications is to integrate inputs from various organizational functions into a holistic and meaningful map of company's activities, depicting its interactions with suppliers, customers, and so on.

As long as the MkIS is been applied in a timely fashion, decision making is facilitated by relying on the fact and figures more than gut-feeling and intuition (Van Bruggen et al., 1998; Talvinen and Saarinen, 1995. McDonald and Payne (2005) stated that the decision making through MkIS

is a major prerequisite for developing realistic and successful marketing plans; this in turns affects both the company's marketing planning process and the outcome of this process (Amaravadi et al., 1995; O'Brien et al., 1995). Therefore, the result is improvements in the marketing planning effort among many other consequences, a positive direct effect on marketing operations. The adoption and usage of MkIS in most organizations they eventually become capable of transforming marketing intelligence into concrete benefits for their customers (Brady et al., 2002). This invariable in turn allows organizations to improve their marketing operations, better forecasting accuracy coupled with a stronger understanding of customers' needs. Thus this would allow a bank or any organization to handle customer reception and service-related operations more smoothly and to cope more effectively with peaks and troughs in demand (Gounaris et al., 2007). Other important aspect of organizations internal strategies capabilities relates to the human factor along side with the management of the company's internal relationships. It could be argued that successful companies differ from the less successful ones by the internal climate and the extent to which marketing employees enjoy high levels of job satisfaction. The function of the job description, individual capacity to comply with the job specifications and interpersonal relationship in the workplace also differs.

The impact that MkIS has on an organization's human capital is quite overwhelming when it comes to job satisfaction and performance. The adoption of the IT- based MkIS assist to improve the internal communication between fellow employees in the marketing department, thus information dissemination becomes simple and faster, thus reducing conflicts between managers and their employees. Decision making in the organization is also solidified in more objective

information and data that the system produces. An important contribution is the improvement of job descriptions and the nature of the tasks that marketing employees must accomplish.

The highly efficient IT-based MkIS gives organizations the opportunity to automate many of the routine tasks that are parts of many jobs (Brady et al., 2002). Therefore employees have the opportunity to save time and avoid the complexities associated with the execution of routine and tedious tasks. The integration of the information in the MkIS allows the marketing executives to build a well-defined picture of customer's needs, which in turn allows them to perform better and meet their job requirements, particularly when it comes to such tasks as sales and customer service.

2.1.4 The External Dimensions of the Effectiveness MkIS

The ability of the MkIS to monitor the company's market environment more effectively is an important benefit to the organization that uses it. This is realized mostly in the area of customer relations by assisting the sales/marketing people and managers to meet their marketing objectives (Speier and Venkatesh, 2002). Thus, organization will then understand the needs, wants and expectation of the target customers (Colgate, 2000), so long as the needs and wants of the customers are known, customers expectation can be easily perceived and responded to in due time (Nakata and Zhu, 2006). The clear marketing strategy and the intelligent support of the IT allow the information system to understand the person behind the transaction as well as monitor the transactions (Davenport et al., 2001). In addition, understanding the clients and consumers

behavior does not only allow the organization to understand the clients present needs but also their future needs satisfactorily well. Therefore the customer satisfaction will increase and the company will have an upper hand in the market share.

The contribution of MkIS to improving the effectiveness and the efficiency of the marketing and communication efforts is also of importance, because the process of developing new products, rebranding or modifying existing products can be aligned with the needs and expectation of clients and customers which in turn allows for a higher rate of successful product launches and therefore the efficiency of the market efforts will be increased. There will also be increased and efficient communication within the system because the company will have a better understand of the customers' media habits individually and collectively. The known customers reaction to communication media will invariable reduce wastage in media resources; therefore the need for direct marketing can be realized. Thus improvements in the implementation of the marketing strategy is increases the company profitability (Colgate, 2000).

2.1.5 Interrelationships among Internal and External Dimensions of MkIS Effectiveness

Quinn and Rohrbaugh (1983) gave a consideration to the notion of the organization effectiveness with a suggestion of four major factors which are; stability and employee centricity (internal process dimensions), and flexibility and organizational efficiency (open system dimensions). The

degree of the effectiveness of any organization does not necessarily simultaneously excel under the four factors.

In a related study, Kalliath et al. (1999) discussed that expected zero correlation exist between open systems and internal process dimensions of effectiveness and does not necessarily apply in all circumstances .For instance, under conditions of turbulent, radical change, the company's management becomes proactive in responding to anticipated changes in the environments. As a result, a paradox that arises concerning the coexistence of stability and order (internal process values), since coping with such conditions frequently calls for organizations that are simultaneously stable and dynamic (Gounaris et al., 2007). Nevertheless, the work of Buenger et al. (1996) gave empirical support that there is possibility that organizations emphasize multiple effectiveness criteria. The implementation of MkIS can change the role of the marketing function radically and help to increase the company's degree of customer orientation (Nakata and Zhu, 2006). This will therefore increase its procedure, customers' service and also the ability to innovate. The implement the necessary changes the management will have to retain control over the organizational re-engineering that these changes bring about.

2.1.6 MkIS and Organizational Effectiveness: Concurrent Validity

With the clarification on the dimensions of MkIS effectiveness and their interrelationships, it is of paramount importance to note the issue of current validity using the scope of a specific study to derive an empirical instrument for its measurement and validation. The concurrent validity of the instrument is essential because it shows the extent to which "one measure of a variable can

be used to estimate the current score on a different measure of a closely related variable" (Tull and Hawkins, 1987). Therefore accessing the degree of concurrent validity of an instrument requires measurement of its ability to explain a significant amount of variance in a related variable.

Studies have reported that organization theories focused on understanding the concept of organizational effectiveness. Gounaris et al stated some related authors of models that have been seeking to capture the construction of the organization effectiveness, but of them all Quinn and Rohrbaugh (1983) has gained more prominence and wide acceptance. Quinn et al (1983) suggest that organization effectiveness is derived from three factors which are namely: the organization's primary focus, its structure and, the means-ends that it pursues (Gounaris et al.) The merit of this competing values model is its power to simplify the large number of effectiveness criteria and yet synthesize them in a meaningful manner. According to this model, the three facets of organizational effectiveness, when combined, generate four "dimensions" are: the human relations dimension, capturing the organization's ability to manage personnel-related issues; the internal process dimension, capturing its ability to manage its operations; the open system dimension, capturing its ability to align itself with the environment in which it operates; and the rational-goal dimension, capturing its ability to attain its goals and objectives. The first pair is differentiated from the second in that they have, respectively, internally and externally orientations (Gounaris et al).

2.2 ORGANIZATION THEORY AND TECHNOLOGY MODELS

2.2.1 ORGANIZATIONAL ANALYSIS MODELS

The organizational analysis models are used in measuring the effectiveness or performance of an organization. It has been reasonable argued that the effectiveness literature represents the central theme of organization theory. Quinn &Rohrbaugh, (1983) further argued that literature on organization effectiveness is a grounded version of literature of organization theory

The human relation model put on much emphasis on the flexibility and internal focus. Such criteria as the cohesion and moral are regarded as means while the human resource department is regarded as an end. The open system model places much emphasis on the flexibility and the external focus, it stresses the criteria such as the flexibility and readiness as (means) while growth, resource acquisition, and external supports as (ends). The rational goal model places a great emphasis on the control and external focus and it stresses the effectiveness criteria, it places emphasis on the planning and goal setting as (means) while the ends are productivity and efficiency. The internal process model places emphasis on control and internal focus, it stresses the role of information management and communication as (means) while the stability and control as the (end) (Quinn &Rohrbaugh, 1983). These four models has been the pivot for the measuring instrument developed by Markku et al (1992) and Gounaris et al (2007). The figure below gives a pictorial representation of the models and their relationships

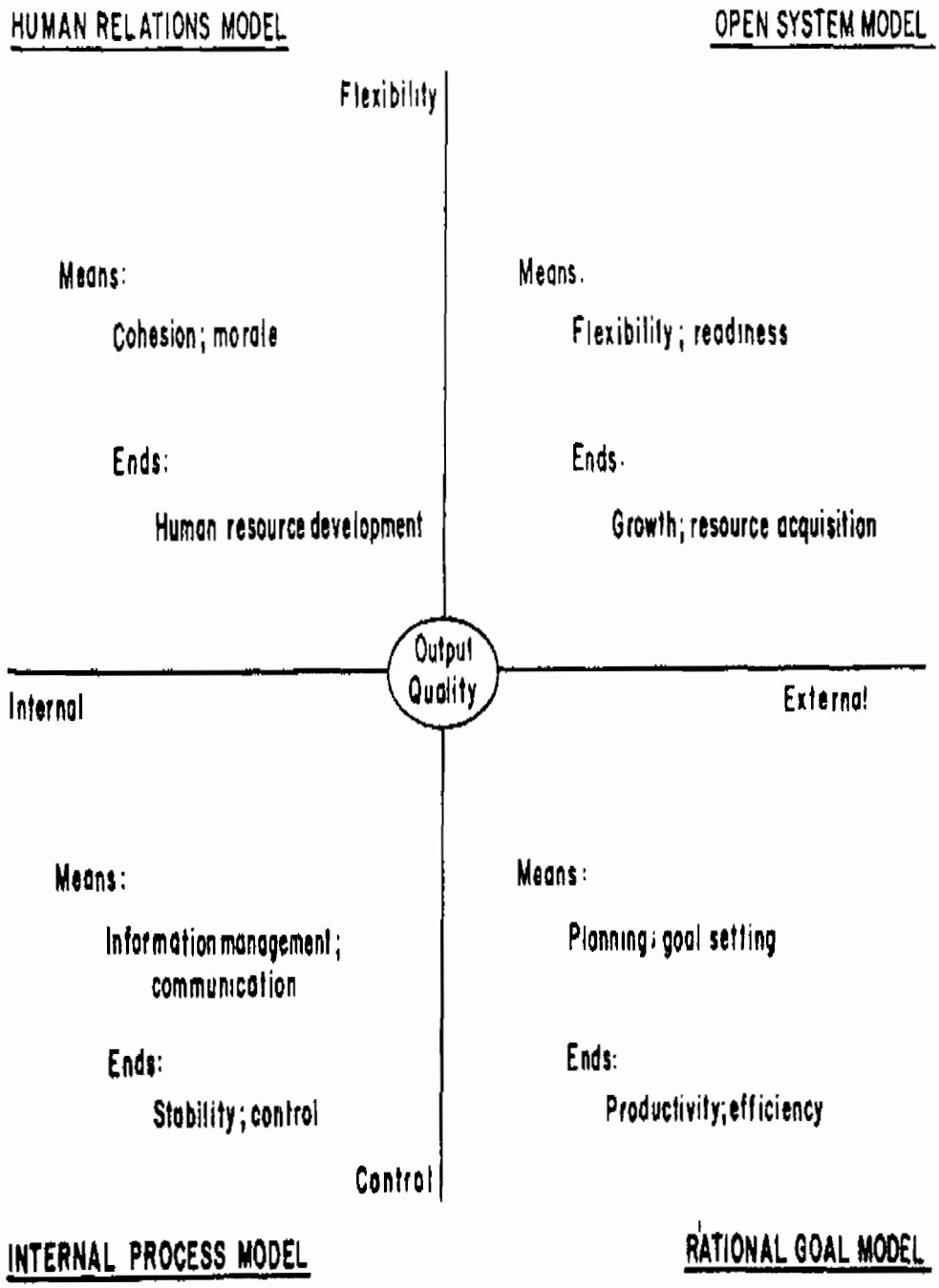

Figure: 2.1 A simplified representation between the three value set and effectiveness criteria (Quinn and Rohrbaugh, 1983).

2.2.2 TECHNOLOGY ACCEPTANCE MODEL (TAM)

The use of Information Communication and Technology/Information Systems in organizations remains complex and elusive, yet an extremely important phenomenon and many studies have empirically examined its determinants. Adoption of IT/Information Systems has been extensively studied across academic disciplines from psychology to communications to IS. The Technology Acceptance Model (TAM), frequently employed by IS scholars, is a model specific to IT adoption that focuses on two discrete beliefs: perceived usefulness (PU) and perceived ease of use (PEOU) (Rouibah, 2008). In a recent study Venkatesh& Davis (2000) and sited by Rouibah (2008) integrated the construct of subjective norms into the TAM model to yield an updated "TAM 2" model. This expanded version of the Technology Acceptance Model (TAM) is used to test the impact of four factors (subjective norms, perceived ease of use, perceived usefulness, and perceived enjoyment) on the level of IT usage by clients and customers. Critical review of TAM shows that there is a need to include other constructs in order to gain a broader view and a better explanation of Information Systems/Technology adoption. Some school of thoughts argued that factors related to human and social change processes should be incorporated into TAM. Although, couple of years back, Information Systems researchers have debated that traditional models of IT adoption be expanded to include factors such as intrinsic motivation or "enjoyment" to help explain IT adoption and usage (Heijden, 2004). Some others suggest that researchers should also account for the influence of perceived user resources which has recently been used to analyze IS/IT adoption in developing countries. Therefore in this study, we will explore the usefulness of the MkIS, which explores clients' perceptions in the use of the Marketing Information System in the Jordanian Banking industry. It is to be noted that efficiency

and convenience in determining the differences in customer value perceptions between internet and other banking information systems is also of importance (Laukkanen, 2007).

2.2.3 Technology Acceptance Model Theory

The main goal of this model is to predict the acceptance of customers. In accordance to Davis (1986) TAM specifically predict the acceptance of the system, identify the modifications that must be imported to the system in order to make it acceptable to users. There are two important factors that determine the acceptability of an information system, those factors are: perceived usefulness and perceived ease of use.

The degree to which a person believes that the use of a system will improve his working performance can be explained as perceived usefulness. On the other hand, perceived ease of use refers to the degree to which a person believes that the use of a system will be effortless. The positive outcome of these measurements will add positively to the performance of the organization to which the person in question works for. Also, quite a number of analysis has showed that perceived usefulness and perceived ease of use can be considered as two different dimensions. In this study we shall focus on the perceive usefulness and ease of use.

Technology Acceptance Model theory means that behavioural purposes identify the use of an information system. It could be argued that behavioural purpose is identified by the person's approach towards the use of the system and his perception of its effectiveness. Davis further argued that the attitude of an individual is based on the impact which it may have on his performance, not the only factor that determines his use of a system. Therefore, this implies that

even if the staffs do not like an information system, the possibility that they are going to use it is high if they convince that the system is going to improve their performance at work. Besides that, the Technology Acceptance Model hypothesizes a direct link between perceived usefulness and perceived ease of use. With two different systems recommend same advantages, the client is going to find more useful than that one who find is easier.

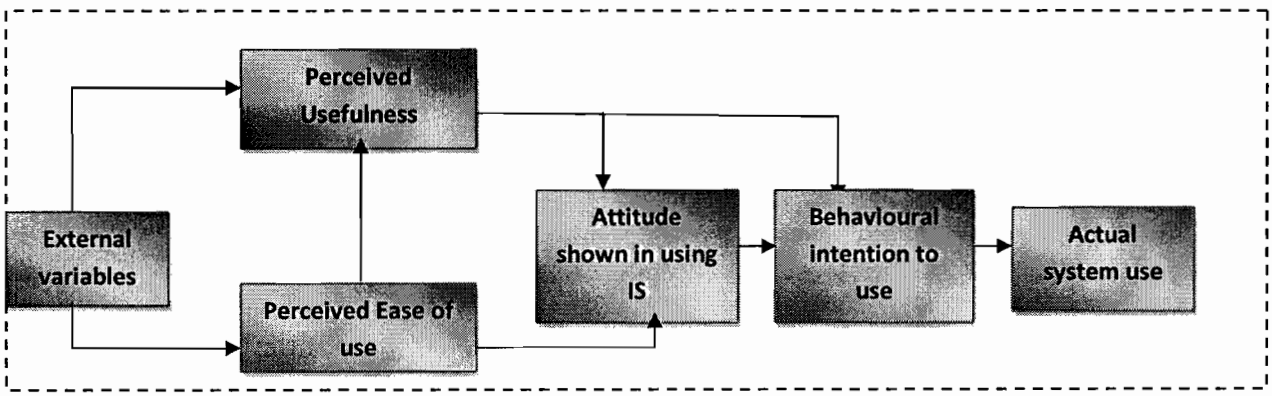

Figure: 2.2 Theory of Technology Acceptance Model

Perceived ease of use according to Davis (1986) also influences in a significant way the attitude of an individual through two main mechanisms: self-efficacy and instrumentality. Self-efficacy is a new concept improved by Bandura (1982) which explains that the most system is easy to use. Furthermore, an instrument that is very easy to use will make the person feels that he has a control on what he has done (Lapper 1985). One factor that is very important to the performance of the employee using a specific information system is Efficacy (Bandura 1982), and what we have shown here is the direct link between perceived ease of use contribution in instrumental way in developing a person's performance.

According to this model, we can predict that the factor which affects the user is the efficacy of an instrument. However, it is interesting to note that the research presented by Davis (1989) to legalize his model, demonstrates that the strong link between the intention to use the information system and perceived efficacy are stronger than perceived ease of use. New research on IS usage and acceptance suggest that TAM has as one of the most effects models in this stream of research. The TAM represents a significant theoretical contribution to understand IS acceptance and IS usage behaviours.

2.3 IMPORTANT FACTS ABOUT JORDAN

There has been great revolution in Management Information Systems in all over the world but many businesses in Jordan still do not use maximise the potency of MIS. Some organization here still depend on paper-based mediums to achieve their business processes or depend partially on more than one information system that are old and each of them serve specific department. Although this may be as a result of misunderstanding or misperception of the benefits and advantages of using MIS but it may also results from mistrust of applying it.

Therefore most small Jordanian organization's managers believe that applying MIS is impractical and is just has benefits if the organization is very huge. In as much as we cannot argue that use of information systems works better with large organization. It is important to note that their believes come from the fact that MIS need very long time to apply it and need to be learned from all employees within the organization. Employees and managers should be trained a lot of time to be familiar with the new system; which may strain the employees and the organization as a

whole during the converting time (the original work of employee plus the training time for learning about new MIS).

Contrary, the management of most Jordanian banks knows the importance of the MIS , therefore their investment in the use of Marketing information system to have an edge over their increase competitors, achieve great revenues and generate overall firm profits.

There is a paucity of knowledge about what factors influence ICT acceptance and usage in Jordan. Although studies of IS/IT adoption and use in Jordan are beginning to emerge, just a few have used established theories, such as TAM. Those that have used TAM have applied it to study IT usage in workplace settings; however, its application to social settings in the Arab world has not been established. It is certainly possible that TAM may not apply to Arab users or may produce different results in the context of a type of ICT usage. In addition, many studies have shown that cultural beliefs and norms play a significant role in ICT adoption in the Arab region. Hill et al.(1998) cited in Rouibah (2008) found that culture beliefs and technological culture (i.e. cultural exposure and the experiences that individuals have with technology originally developed in other countries) affect IT transference to Arab countries. These factors have an influence on the ease with which new forms of ICT can be transferred from "western" cultures to the Arab world.

2.4 Arab Culture and Islam belief in Jordan

The practices in Jordan are influenced by the Arab culture and the Islamic believe which governs the customs and daily life of the people. Arab culture also emphasizes politeness and modesty – prohibiting social contact between men and women before marriage; therefore, overt discussion of love and sexual matters, as well as social contact (including conversation) between unrelated men and women are publicly discouraged. The availability and usage of new ICTs may challenge these traditional barriers. This may explain why Hill et al. (1998) cited in Rouibah (2008) found that religious values tend to reinforce resistance to IT transfer among Arab people, particularly among individuals who associate ICT with foreign influences on the Arab social structure, such us encouraging communication between unrelated men and women. Moreover, the emphasis on politeness in Arab societies means that direct criticism is not favourably viewed. In summary, adoption of various forms of ICT is influenced by a multitude of factors including perceived ease of use (PEOU), perceived usefulness (PU), subjective norms (SN), and perceived enjoyment (PE) (Rouibah ,2008). Nevertheless, we are going to focus more on the perceived usefulness for the purpose of this study.

Financial services delivery and consumption has experienced major changes during the last years. Technological development and usage has reshaped the business environment. The banking industry is among the leading sectors in adopting and information technology on consumer markets and consequently its service delivery has undergone changes unprecedented in its history. The development of electronic banking services via multiple electronic channels has made it possible to provide new kinds of added value for customers (Laukkanen, 2007).

Therefore, understanding service user behaviour and value perceptions is one of the fundamental prerequisites of service development. Customers have become less willing to visit traditional branches, less loyal, more receptive to new electronic channels and more sophisticated in demanding better service quality including 24 hour service availability. However, despite its advantages, the use of Marketing Information Systems in Jordanian banking is still in its infancy. The objective of qualitative studies is not to find results that can be generalized but instead to gain a deeper understanding of the phenomenon to be explored.

2.5 SUMMARY

The different literatures that were available on the effectiveness of the MkIS towards the performance of banking organizations were discussed in this chapter. The technologies and the variation measurement and instruments in the effectiveness of MkIS were also discussed. This is very important in order to exploit roles MkIS in the performance of banking sector in Jordan. The measuring variables are important in order to get the desired result in a study like this.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter presents the methodology that was adopted in this study. In the following sections of the chapter, we discussed the rational for the methodology, the domain of survey and the measuring instrument used in the study.

3.2 THE RATIONAL FOR THE METHODOLOGY

In this study, the primary data from a survey were used with the aid of a questionnaire. This is based on the survey and the analysis from the previous works on the measuring instruments. However, According to Okazaki, (2005) the major importance of the telephone survey is that a largely distributed respondent sample could be covered without the assistant of a field staff. It also provides a speedy means of obtaining information with quite a low non response rate.

Furthermore, in this survey item definition control is considered to be of great importance because of the novelty of the study. Clarification of doubts and the answers posed by the respondents are expected to be cleared by the researcher during the course of information gathering. There has been little empirical research from both academics and the practitioners in this area of study. Therefore this study shall contribute to the literature in this area of study

3.3 THEORETICAL FRAMEWORK

According to Okazaki (2005) branding strategy, location-based services, and service costs were determined to be the most important managerial factors in establishing some business model, while facilitating condition, regulatory control, and cultural barriers were the most relevant environmental factors for such models. However, we incorporated a variable "ease of use" model of the Technology Acceptance Model (TAM) as part of the theoretical foundation for the development of the theoretical framework. This shall assist us in measure the satisfaction of the MkIS. TAM posits that perceived usefulness and perceived ease of use determine a person's behaviour while applying and using an accepted technology. The applicability of an extended version of the technology acceptance model (TAM) to IB was tested by Wang et al. (2003) in Taiwan. Probing those factors that lead to behavioural intention, the authors found evidence that perceived ease of use, perceived usefulness, and perceived credibility all had a significant positive effect on people's intention to use an information system.

There are four models that are used to measure the effectiveness of MkIS, these are: Internal Process Model, Human relations Model, Open System Model and Rational Goal Model. These

models are used in measuring the performance of an organization using the effectiveness of MkIS. Markku et al (1992) and Gounaris et al (2007) used these models to design an empirical instrument to measure the effectiveness of MkIS in some organizations. The design and empirical validation of an instrument to measure the role or the effectiveness of MkIS could be challenging. Therefore, conceptualization of the MkIS effectiveness must be developed into a measuring instrument for experimental application for data collection. In a previous study Gounaris et al (2007) combined the important four models to measure the effectiveness of MkIS in some organization. The instrument developed by Gounaris et al. is capable of revealing the effectiveness of the MkIS in an organization in both internal and external components, relating to the extent to which the user organization improves functional effectiveness and corporate climate and on the other hand to its adaptability to market conditions and its customer responsiveness. The authors inferred that a validated measure of the effectiveness of MkIS has important implications for both users and providers. The validated instrument conceptually permits improved understanding of the components of effectiveness. Pragmatically, the instrument provides an assessment of the effectiveness of existing or new systems. Return on Investment and Sales growth are the two main elements that was described by Pelham (2000) in measuring the performance of an organization, hence it is used in this study. Drawing on the above factors, this study proposes a model that helps to understand the roles of MkIS in the performance of Jordanian banks.

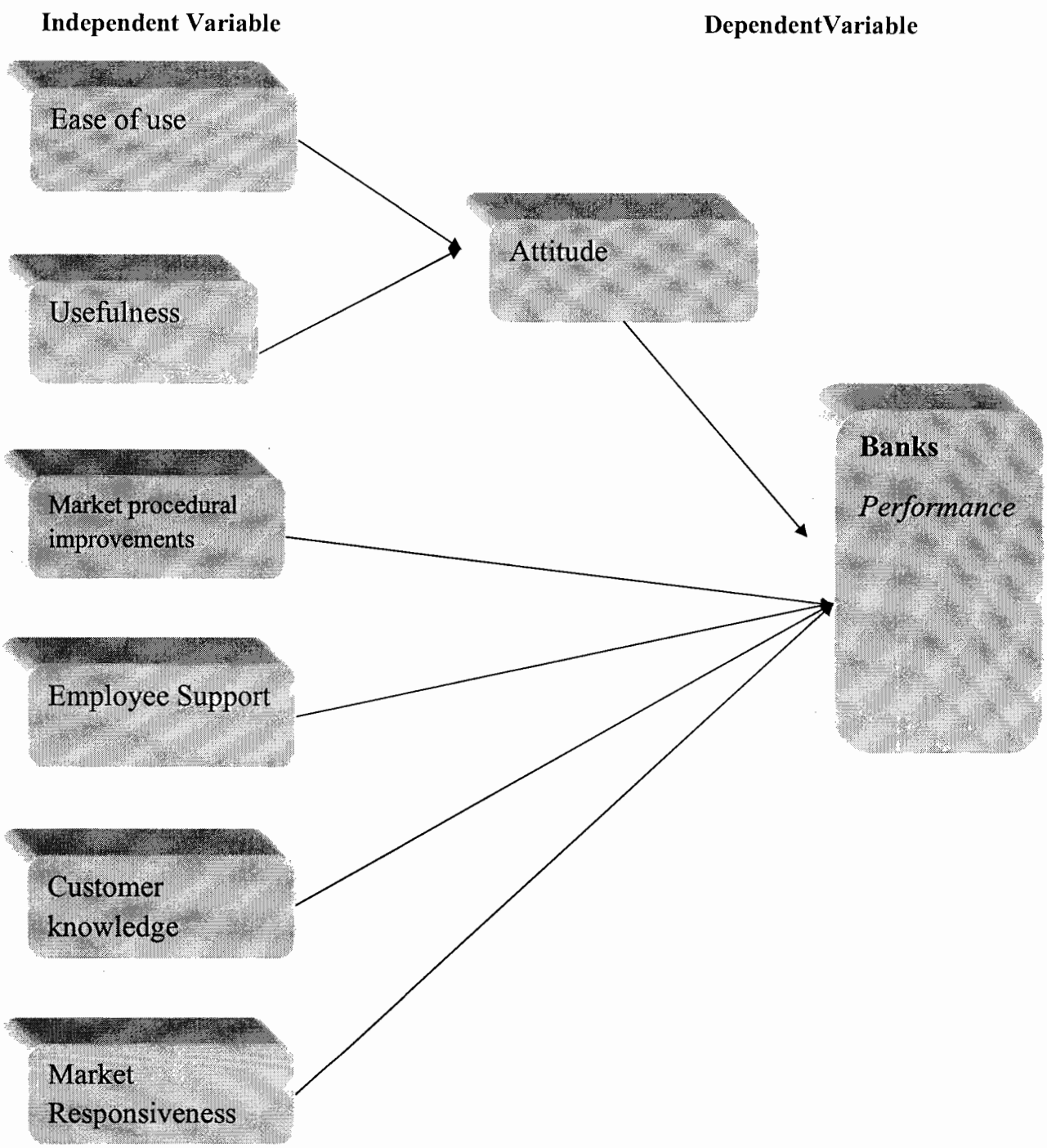

Figure: 3.1 Research Framework

3.4 Operational Definitions of Variables

The definitions of the main variables used in this study are listed in Table 3.1.

Table: 3.1 Operational Definitions of Variables

S/N	Variables	Definition
1	Ease of use	The strength of someone does believe that interacting with MkIS would be free of effort (Moon and Kim,2001).
2	Usefulness	The ability of ones belief that using MkIS will support his/her works performance (Moon and Kim, 2001).
3	Attitude	The ability of someone's feeling of likeness or unlikeness toward the use of MkIS (Moon and Kim,2001) and Lam, Cho, and Qu (2007).
4	Market procedural improvements	The strength of MkIS to assist one in marketing procedures(Gounaris, 2007)
5	Employee Support	The strength of the Information system to support the user (Gounaris, 2007).
6	Customer knowledge	The strength of the information system to reveal customers behavior through data analysis (Gounaris, 2007).
7	Market Responsiveness	The strength of the information system to reveal market information (Gounaris, 2007).
8	Performance	This is the level to which the organization is successful in reaching its goals. This could be measures by dimension of performance such as ROI, margin on sales, customers' satisfaction, capacity utilization and product/services quality (Hoque and James 2000).

3.5 THE DOMAIN OF SURVEY

3.5.1 Population

Survey are useful and powerful in finding answer to research questions through data collection and data analyses, the survey could be faulty and do more than good if the sampling population is not rightfully targeted (Sekaran,2003).

In this study, the populations selected are within the in the banking sector of Jordan. The populations are bank marketing managers in Jordanian banks, in order to determine the research objectives. In addition they can influence on management decisions. The number of sample needed will be about 85 to 100 selected based on Sekaran's (2007) rule of thumb tables. To identify the sample, we will use proportionate stratified random sampling among banks marketing executives and managers, the questionnaire will be distributed as the researcher will determine the correspondence in both public and private banks in Jordan.

Sampling is any procedure or method that uses a small number of items or those users part of a particular population to make a conclusion regarding the whole population. Therefore a sample is a subset from a larger population. The main reason why sampling comes in to play is because it is practically impossible to collect data from every element of a population neither is it possible to test or examine all the elements. Hence, in this research, the population sample is chosen from the marketing managers from banks in Jordan. This is to prepare better acquisition of data and information if compared to the whole population.

3.5.2 Sampling

Probability sampling design is when elements in the population have a known chance of being chosen as subjects in the sample. It can be either unrestricted (simple random sampling) or restricted (complex probability sampling) in nature. It's different with non probability design where the element in the population does not have any probabilities attached to their being chosen as sample subjects. This implies that the findings from the study of the sample cannot be confidently generalized to the population.

In this context of this research, the sampling designed used is the simple random sampling. Thus, the study is interested in acquiring information from bankers that makes use of MkIS. Therefore, bank's managers used as the population for study. Thus, every element in the population has known and equal chance of being selected as a subject in the study.

3.6 RESEARCH INSTRUMENT DEVELOPMENT

In an empirical research, the findings from the study should generalize the entire population. Hence, the appropriate sample design and size should be achieved. Roscoe (1975) proposed the following rules of thumb for determining sample size. This rule of thumb has been the pivot for other rule of thumbs in determining the sample size:

1. Sample sizes larger than 30 and less than 500 are considered appropriate for most research.

2. In a place where samples are to be broken into sub-samples; (male/female, juniors/seniors, etc.), a minimum sample size of about 30 for each category is considered important.

3. In simple experimental research that has very tight experimental controls (matched pairs, etc.). The successful research is possible with samples as small as 10 to 20 in population size.

4. In multivariate research which includes multiple regression analyses, the expected sample size should be several times (preferably 10 times or more) as large as the number of variables in the study.

3.6.1 Sample Size and Response Rate

In this research, the population sizes of banks used in this study are (150) marketing managers, In the process of conducting the main study, 150 questionnaires were distributed to bank marketing managers in Jordan banks during February 2010. Out of this number, 10 were undelivered, and 5 questionnaires were incomplete (missing responses). Thus, a total of 135 responses were usable for subsequent analysis, giving a response rate of 90 % (Table 3.1).

Table: 3.1 Summary of Response Rates

150	Questionnaire administrated
10	Undelivered
5	Uncompleted
135	No. of responses
(135/150) 90 %	Response rate

3.6.2 Validity

The validity of the instrument ensures scaling in measuring the intended concept. In the course of developing a measuring instrument, taking the questions in the questionnaire as an example; the purpose is to tap and measure the concept. This is done by the rightful application of the certain validity test. The testing of validity can be done in a few ways and one of them is through content validity:

The term content validity ensures that the measure includes a representative and adequate set of items that tap the concept. Sekaran (2003) made it known that the more the scale items represent universe of the concept being measured or the domain, the greater the content validity. Decades ago, Bohmstedt (1970) stated that to ensure the content validity of scales, the items need to represent the concept about the generalization which is about to be made. Therefore, this research uses items from prior studies to ensure content validity.

3.6.3 Data Collection Technique

The primary objective of this study is to test the research hypothesis which is based on the conceptual framework of this study. Thus, this study will use quantitative research approach and survey the marketing executives in the Jordanian banking sector. Questionnaire is designed and distributed to the sample of the research. Further translation of the questionnaire to Arabic Language will also improve the quality of the research.

3.6.4 Data Analysis Technique

The purposes of data analyses and hypotheses testing, several statistical methods were employed from SPSS software version 12. These include descriptive statistics to describe the characteristics of the respondent, test of differences to compare the extent of attitude towards the respondents between different demographic profiles. Also the correlation analysis is used to describe the relationship between variables and regression analyses to test the impact of independent variables on dependent variables.

The use of the statistical software SPSS 12.00 version employed is to examine the data in the comprehensive manner. The simple and advance statistical tools and method were both used to analyse the relationship amongst the variable and the model. Thus, usage of statistical techniques is according to commonly accepted research assumptions and practices.

Following statistical analysis, we will perform the data analysis for this study. Among the analysis method that will be use in SPSS are reliability test, correlation, linear and multiple regression analysis. Multivariate technique of statistical data analysis will determine the level of effectiveness of MkIS on the performance of Jordanian banks.

3.7 SUMMARY

This chapter explained the methodology applied in this study. The research was conducted in phases which are the rational for the methodology, the research framework analysis, design of the research instrument, and the techniques used in analyzing the effect of MkIS on the performance of Jordanian banking sector. The findings and results from the application of the measuring instrument developed here are discussed in the following chapter.

CHAPTER 4

RESEARCH FINDINGS

4.1 Introduction

The outcomes of the analysis are discussed in this chapter, all the findings through statistical analysis to reveal the analysis and the discussions as the results of the data analysis. Evidences and factor behind measures ease of use, usefulness, attitude, marketing procedural improvement, employee support, customer knowledge and market responsiveness in the performance of banking industry in Jordan are discussed.

The observations were made on the events which were recorded in form of questionnaires with the choice of appropriate study design and adequate sample size. Emphasis was made on the relationship between ease of use, usefulness, attitude, marketing procedural improvement, employee support, and customer knowledge and market responsiveness in the performance of banking industry in Jordan.

Likert Scales are considered in this study, as the ordinality refers only to an ordinal relationship of values within a single item. Likert scales are by far the most common type of survey item, in which the usual response categories are "strongly agree," "agree," "neutral,", "disagree," and "strongly disagree." These values are ordinal within any given Likert item but sets of Likert items are not necessarily ordinal with respect to each other.

Indexes can be formed from sets of Likert items, the researcher also insists such sets pass the cronbach's alpha or some other test of intercorrelation to be sure that all items are conformed in the research variables construct.

The data and information collected from the banking sector in Jordan. We collected the data by distributing the questionnaires amongst respondents' managers of banks in Jordan. There are indeed many statistical techniques that can be carried out to draw accurate conclusion on the ease of use, usefulness, attitude, marketing procedural improvement, employee support, and customer knowledge and market responsiveness in the performance of banking industry in Jordan.

We analyzed the study data using descriptive statistics, correlation, and regression Pearson correlation used to see the correlation among variables, linear and multiple regressions to check the effect of the independent to dependent variables.

This chapter is well structured to give a detailed discussion of the empirical testing of the model that was hypothesized. The result of the final relationship variables, competing model and the testing of the influence of the variables are also presented in this chapter.

4.2 Profiles of Respondents

4.2.1 The gender Respondents

Table: 4.1 The gender Respondents (n: 135)

Measure	Item	Percent %	FrequencyN
Gender	Male	81	110
	Female	19	25
	Total	100	135

The table 1 above shows the gender distribution of the sample population. From the table it is evident that the male respondents are 81% of the total population of 135 respondents. The female respondents were 19%. This shows that the number of male marketing manager in this survey is more than the female marketing managers. Figure 2 below shows the pie chart distribution of the table above

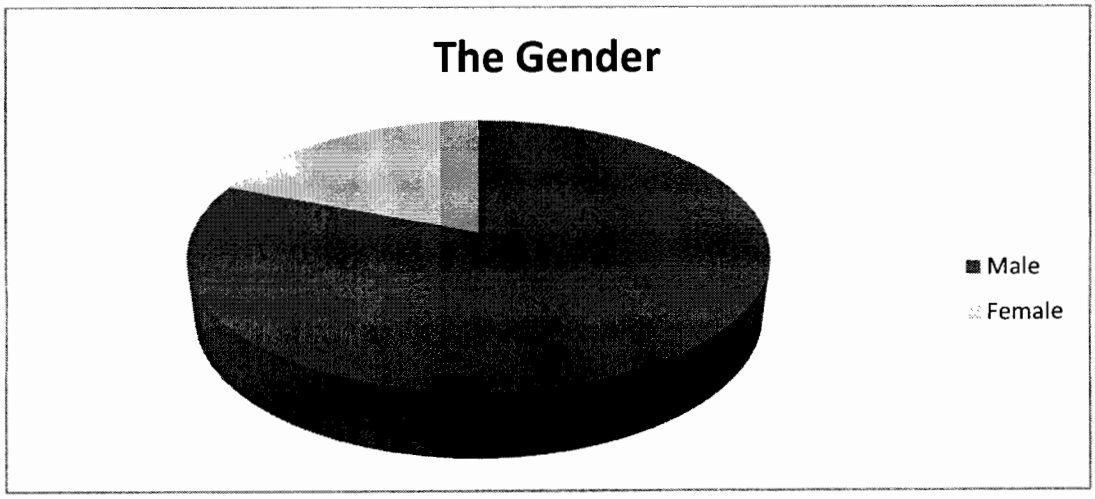

Figure: 4.1 Chart of gender distribution

4.2.2 The age of respondents

Table: 4.2 The age distribution table

Measure	Item	**Percent %**	**FrequencyN**
Age	18-22 Years	0	0
	23-27 Years	0	0
	28-32 Years	5.9	8
	33-40 Years	82.2	111
	>40 Years	11.9	16
	Total	100	135

Table 2 depicts the age distribution of the respondents in this study. The highest age group which is above 40 years has 11.9% of the total distribution with frequency number of 16 respondents out of a total of 135. Respondents between the ages of 33-40 years have the highest distribution size with 82.2% and 111 respondents. The respondent between the age limit of 28-32 has 5.9% with 8 respondents of the total respondents. There are no respondents within the age limits of 18-22 and 23-27 years. From this distribution we can deduce that most of the respondents are in their middle age, armed with good years of experience on the subject area. Also we can also state here that with the results of the age distribution that it takes quite some years working as a marketer in the bank to attain the position of a manager. This is the reason why most of the respondents fall within the age limit of 33-40 years.

Figure: 4.2 gives a clear diagrammatical expression of the age distribution.

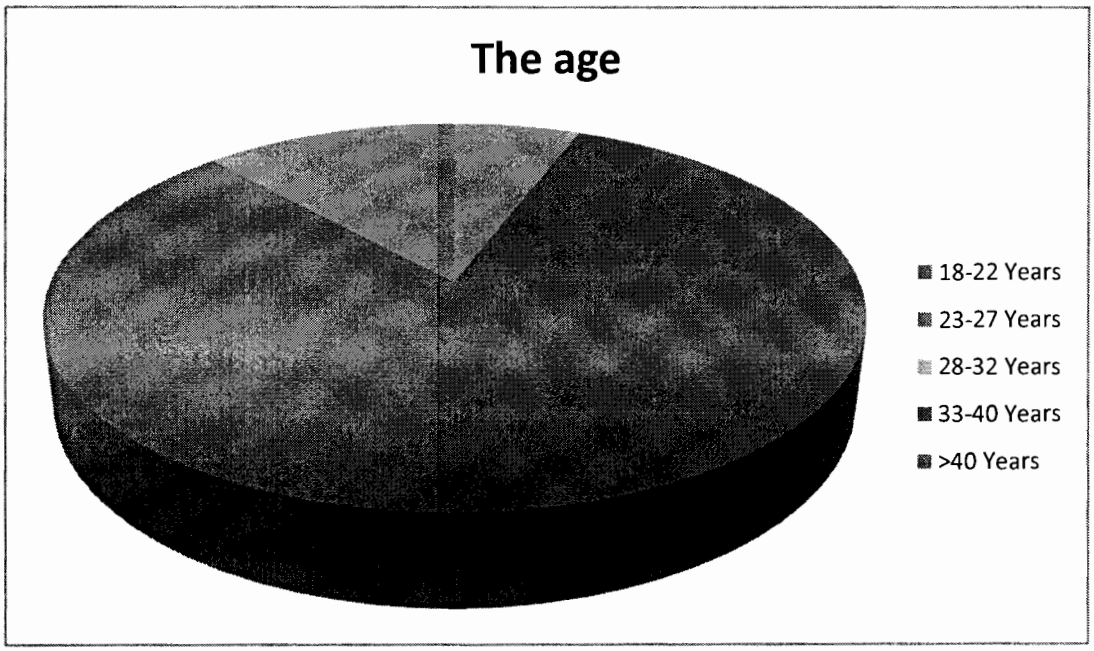

Figure: 4.2 Chart of Age distribution

4.2.3 The Years of marketing experience of Respondents

Table: 4.3 Marketing experience of Respondents

Measure	Item	**Percent %**	**FrequencyN**
Years of marketing experience	One year	0	0
	2-4 years	0	0
	5-7 years	91.1	123
	More than 8 years	8.9	12
	Total	100	135

The table above shows the years of marketing experience distribution of the respondents in this study. The table reveals that 8.9% respondents of the total distribution has more than eight (8) years of experience in marketing with a frequency number of 12 out of 135. One Hundred and thirty-five respondents (123) with 91.1% of the total distribution has 5-7 years of marketing experience, while there is no manager with 1-4 years of marketing experience. Figure 3 shows a clear pies chart distribution of the years of marketing experience distribution.

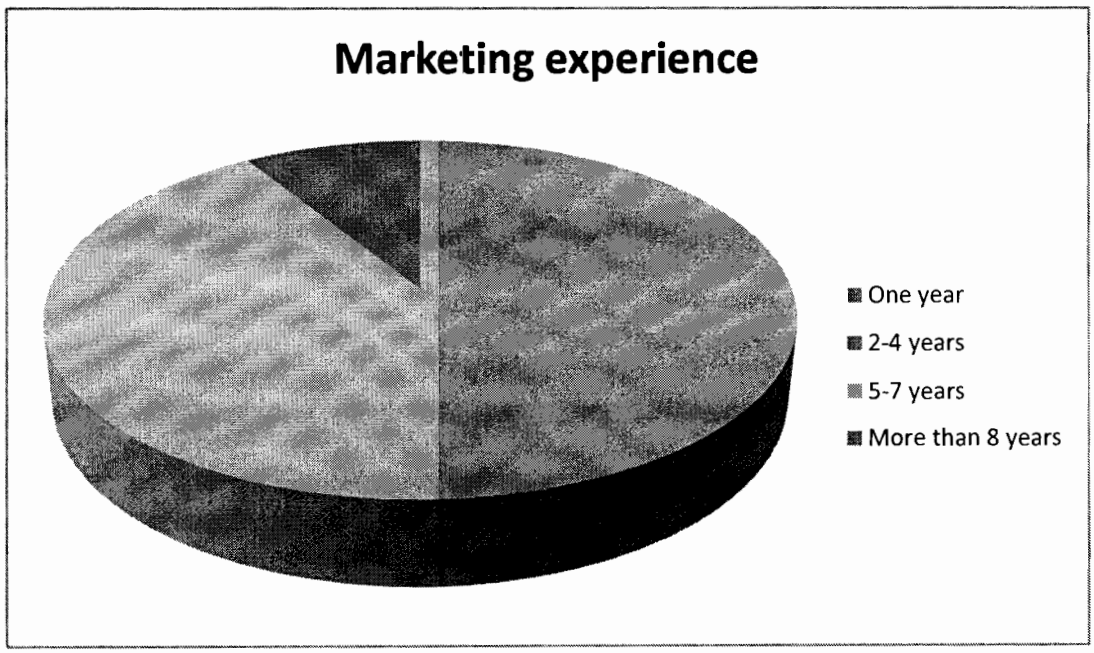

Figure: 4.3 Chart of Years of marketing experience distribution

4.2.4 The Length of using MkIS of Respondents

Table: 4.4 Use of MkIS of Respondents

Measure	Item	**Percent %**	**FrequencyN**
Length of using MkIS	< 1 Year	0	0
	2-4 Years	1.5	2
	5-7 Years	73.3	99
	> 8 Years	25.2	34
	Total	100	135

Table four above shows the proficiency of the respondents in the use of MkIS is this study. 25.2% of the respondents with frequency number of 34 has more than 8 years of experience using MkIS, 73.3% with the frequency number of 99 respondents (the highest) has MkIS experience of 5-7 years of usage. 1.5% of the population has the population size of 2 of 135 respondents of MkIS experience. The table also depicts it that there is no manager with less than 1 year experience of MkIS. This is the reason why the respondents have a good understanding of the questions in the questionnaire. Figure 4.4 below shows the pictorial diagram of the years of experience of MkIS of the managers.

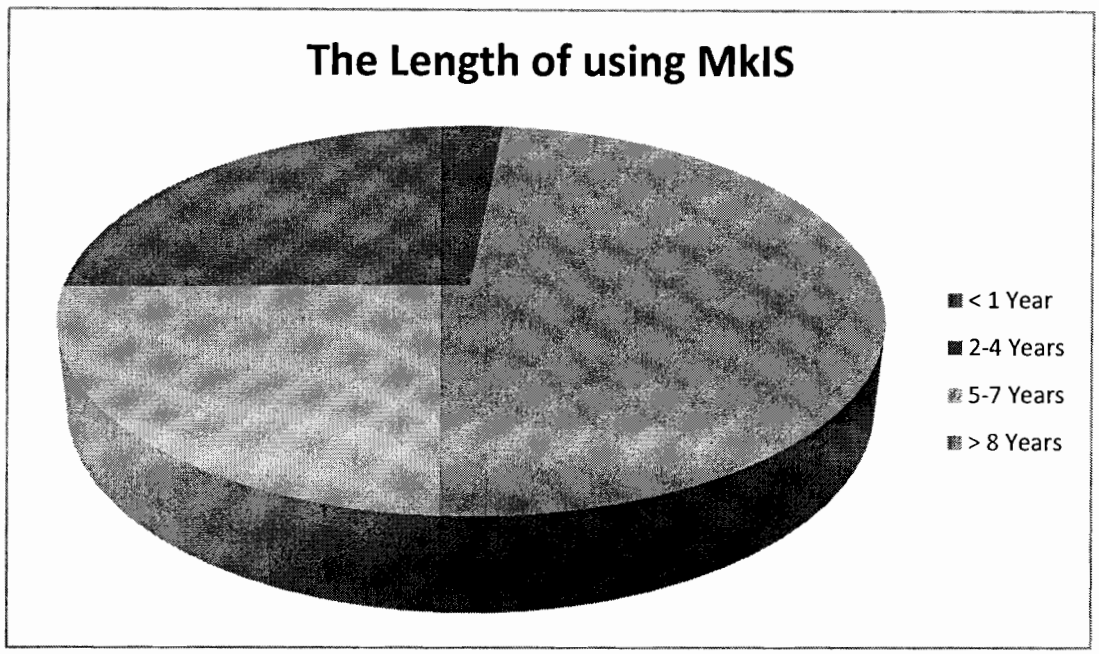

Figure: 4.4 Chart of length of MkIS usage

4.2.5 The Marital status of Respondents

Table: 4.5 Marital status distribution

Measure	Item	**Percent %**	**FrequencyN**
Marital Status	Single	12.6	17
	Married	87.4	118
	Total	100	135

The table above that the large numbers of the respondents are married with 87.4% and a frequency number of 118. The single has 12.6% of the total distribution with 17 numbers. Figure 4.5 below shows a clear diagrammatic representation of the table above.

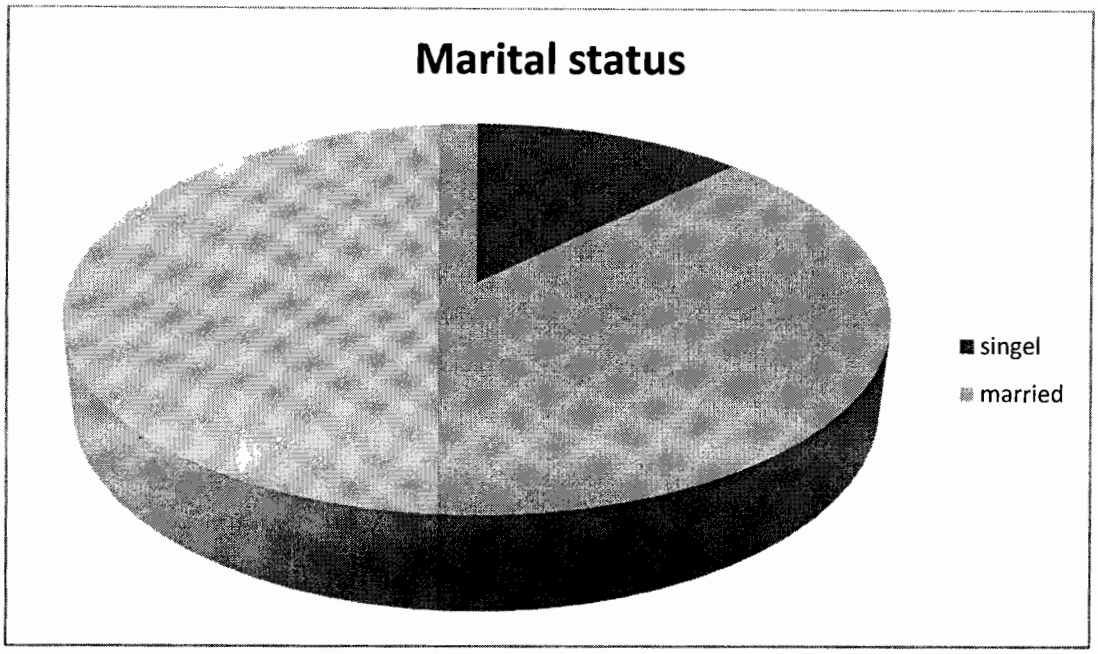

Figure: 4.5 Chart of The marital status

4.2.6 The level of study of Respondents

Table: 4.6 The level of study distribution

Measure	Item	Percent %	FrequencyN
Level of Study	Diploma	0	0
	First Degree	70.3	95
	Master	29.7	40
	PhD/DBA	0	0
	Total	100	135

The table above shows that none of the respondents has a doctorate degree, and diploma but 29.7% with a population of 40 of the correspondents has a Masters degree. The first degree holders have a highest population with 70.3% and 95 of the total respondents used in this study. This implies that most of marketers used in the marketing divisions are well learned. Figure 4.6 below gives a diagrammatic representation of the above table.

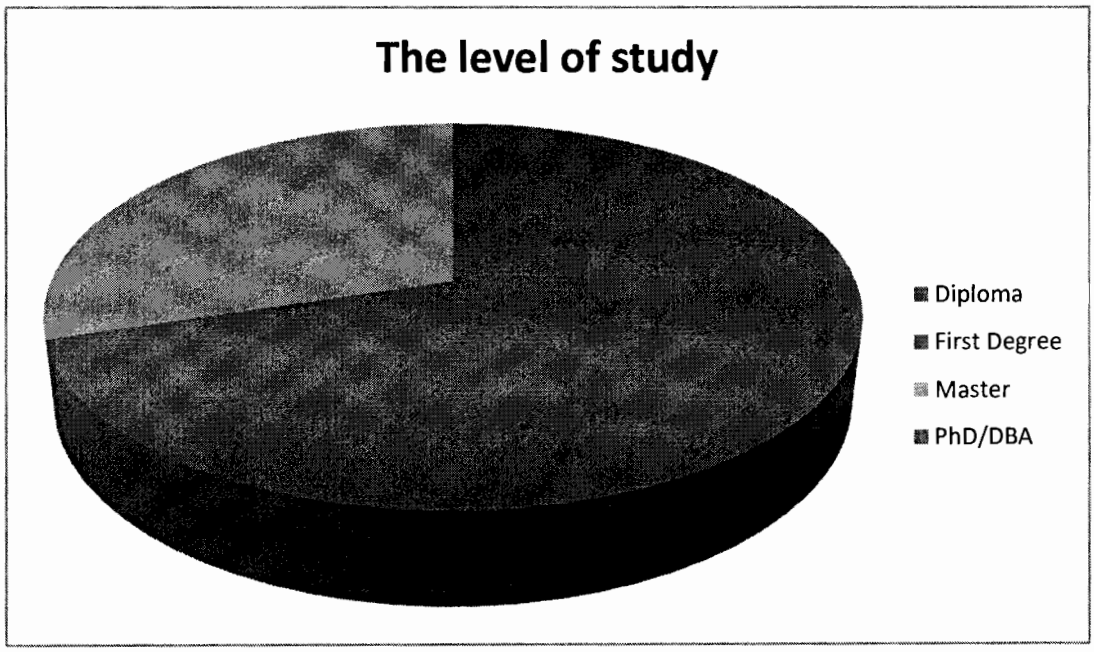

Figure: 4.6 Chart ofLevel of study.

4.3 The Reliability Test

All measures obtained from (n=135) were subjected to reliability analysis to assess the dimensionality of the measurement scale. Scale reliability was assessed in term of items-to-total correlation and Cronbach's alpha to determine the internal consistency of the measurement scale. Reliability, which is a type of association used to correlate a variable with itself, usually in assessing inter-rater similarity on a variable, is also discussed. According to Cohen, (1988) Reliability is the correlation of an item, scale, or instrument with a hypothetical one which truly measures what it is designed to measure.

The measure of intercorrelation of item is Cronbach's alpha. If alpha is greater than or equal to 0.6, then the items are considered unidimensional and may be combined in an index or scale. Most researchers use the more stringent cutoff of 0.7 (Cohen, 1988). Cronbach's alpha is the most common form of internal consistency reliability coefficient. Alpha equals zero when the true score is not measured at all and there is only an error component.

Alpha equals 1.0 when all items measure only the true score and there is no error component. Cronbach's alpha in each research variable can be interpreted as the percent of variance the observed scale would explain in the hypothetical true scale composed of all possible items in the universe. Alternatively, it can be interpreted as the correlation of the observed scale with all possible other scales measuring the same thing and using the same number of items.

4.3.1 Reliability of variables

The Cronbach's alpha was computed to assess the items score of each of the independent variable ease of use, usefulness, attitude, marketing procedural improvement, employee support, customer knowledge, market responsiveness and the dependent variable bank performance score. Each construct shows Cronbach's alpha readings of acceptable values above .60 (Hair et al, 2006). Reliability values for all constructs range from **.70 to .84**.This implies that the items form a scale with internal consistent reliability. As shows in (See Appendix C) gives detailed explanation of the reliability of each item in the variables.

Table: 4.7 Summary of Reliability Test (n: 135)

Variable Name	**Item Number**	**Cronbach's Alpha**
Ease of Use	**7**	**.72**
Usefulness	**7**	**.84**
Attitude	**5**	**.74**
Market Procedural Improvement	**4**	**.78**
Employee Support	**4**	**.84**
Customer Knowledge	**4**	**.70**
Market Responsiveness	**4**	**.75**
Bank Performance	**5**	**.84**
Total	**40**	

4.4 Relationship among Research Variables

Table: 4.8 shows the evidences for relationship between variables from the analysis test. To observe the correlation between variables, Pearson Correlation was used in this study. Table: 4.8 depicts EOF, USE, ATT, MRI has < 80% relationship on the performance of the banks according to Hair et al. (2006) while ES, CK, MR has 80-90% effectiveness level on the performance of the banks. According to pallant (2001) point out that the value of correlation between variables more than .90 considers Multicollinearity.

Table: 4.8 Correlation between Variables

Correlations

		EOU	MeanUSE1	ATT	MRI	ES	CK	MeanMKR	BP
EOU	Pearson Correlation	1	.536**	.657**	.289**	.351*	.444**	.625**	.311**
	Sig. (2-tailed)		.000	.000	.00	.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
MeanUSE1	Pearson Correlation	.536**	1	.677**	.63 **	.587*	.687**	.517**	.528**
	Sig. (2-tailed)	.000		.000	.00	.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
ATT	Pearson Correlation	.657**	.677**	1	.60 **	.645*	.693**	.475**	.607**
	Sig. (2-tailed)	.000	.000		.00	.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
MRI	Pearson Correlation	.289**	.638**	.608**	1	.695*	.511**	.692**	.558**
	Sig. (2-tailed)	.001	.000	.000		.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
ES	Pearson Correlation	.351**	.587*	.645**	.695**	1	.591**	.677**	.638**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	135	135	135	135	135	135	13	135
CK	Pearson Correlation	.444**	.687*	.693**	.511**	.591**	1	.700**	.594**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	135	135	135	135	135	135	13	135
MeanMKR	Pearson Correlation	.625**	.517*	.475**	.692**	.677**	.700**	1	.572**
	Sig. (2-tailed)	.000	.000	.000	.000	.00	.000		.00
	N	135	135	135	135	135	135	135	135
BP	Pearson Correlation	.311**	.528**	.607**	.558**	.63 **	.594**	.572**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	135	135	135	135	135	135	135	135

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

4.5 METHODS OF MULTIPLE REGRESSIONS

Multiple regression is a technique that can be used to examine the relationship between one continuous dependent variable and many independent variables. Generally, there are several methods of multiple regression analysis such as standard regression, hierarchical or sequential, and stepwise regression (Pallant, 2001). In the standard multiple regression, all of the independent variables are entered into the equation simultaneously (Pallant, 2001) and assumed to be of equal importance (Tabachnick & Fidell, 2001). In this study a standard regression method has been conducted in order to test the relationships between contingency factors and banking performance (BP) because all independent variables are assumed of equal importance.

4.6 TESTING THE MODEL USING REGRESSION ANALYSIS

4.6.1 Regression between Ease of Use and Attitude

In order to answer the first research objective that is "to determine the relationship between Ease of use and attitude" Regression analysis was conducted to test **hypotheses 2**. In this analysis, easy of use is treated as the independent variable, whereas manager's attitude as the dependent variable, through regression analysis procedures.

Table: 4.9 Regression between Ease of Use and Attitude

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709	.503	.499	.30533

B Dependent Variable: bank performance

Table: 4.10 Regression between Ease of Use and Attitude

ANOVA

	Sum of squares	df	mean square	f	t	Sig
Regression	12.5471	1	12.547	134.594	11.601	.000
Residual	12.399	133	.093			
Total	24.946	134				

R Square =.503 Standardized Coefficients Beta=.709

The result in Table: 4.9 and 4.10 above shows a positive and significant relationship between Ease of Use and Attitude (t = 11.601, p =000) (See Appendix E). The result suggests that easy of use increase customer attitude, there is an expected increase of .812 in the attitude. Therefore, **H 2** is supported. Furthermore, linear regression was conducted to investigate how access could influence Attitude. The results are statistically significant F = 134.594, p= 0.000. This implies that the linear regression between ease of use and attitude depicts positive and direct significant relationship for 50.3%.

4.6.2 Regression between Usefulness and Attitude

In order to answer the second research objective that is "to determine the relationship between usefulness and attitude" Regression analysis was conducted to test **hypotheses 3**. In this analysis, usefulness is treated as the independent variable, whereas manager's attitude as the dependent variable, through regression analysis procedures.

The result in Table: 4.11 and 4.12 shows a positive and significant relationship between usefulness and Attitude (t = 13.791, p =000). (See Appendix E) The result suggests that usefulness increase customer attitude; there is an expected increase of .734 in the attitude. Therefore, **H 3** is supported. Furthermore, linear regression was conducted to investigate how access could influence Attitude. The results are statistically significant F = 190.201, p= 0.000. In addition, this implies that the linear regression between usefulness and attitude depicts positive and direct significant relationship for 58.8%.

Table: 4.11 Regression between Usefulness and Attitude
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767	.588	.585	.27782

Table: 4.12 Regression between Usefulness and Attitude

ANOVA						
	Sum of squares	df	mean square	f	t	Sig
Regression	14.681	1	14.681	190.201	13.791	.000
Residual	10.266	133	.077			
Total	24.946	134				

R Square =.588 Standardized Coefficients Beta=.767

4.6.3 Regression between Attitude and Banks Performance

In order to answer the third research objective that is "to determine the relationship between manager's attitude and bank performance" Regression analysis was conducted to test **hypotheses 1**. In this analysis, manager's attitude is treated as the independent variable, whereas bank performance as the dependent variable, through regression analysis procedures.

The result in Table: 4.13 and 4.14 shows a positive and significant relationship between attitude and bank performance (t = 8.819, p =000). (See Appendix E) The result suggests that attitude increase customer bank performance; there is an expected increase of .736 in the performance. Therefore, **H 1** is supported. Furthermore, linear regression was conducted to investigate how access could influence performance. The results are statistically significant F = 77.780, p= 0.000. In addition, this implies that the linear regression between attitude and bank performance depicts positive and direct significant relationship for 36.9%.

Table: 4.13 Regression between Attitude and Banks Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.607	.369	.364	.41657

Table: 4.14 Regression between Attitude and Banks Performance

ANOVA						
	Sum of squares	df	mean square	f	t	Sig
Regression	13.497	1	13.497	77.780	8.819	.000
Residual	23.079	133	.174			
Total	36.576	134				

R Square =.369 Standardized Coefficients Beta=.607

4.6.4 Regression between Market Procedural Improvement and Banks Performance

In order to answer the four research objective that is "to determine the relationship between market procedural improvement and bank performance" Regression analysis was conducted to test **hypotheses 4**. In this analysis, market procedural improvement is treated as the independent

variable, whereas bank performance as the dependent variable, through regression analysis procedures.

The result in Table: 4.15 and 4.16 shows a positive and significant relationship between market procedural improvement and banks performance (t = 13.138, p = .000). (See Appendix E) The result suggests that market procedural improvement increase customer bank performance; there is an expected increase of .879 in the performance. Therefore, **H 4** is supported. Furthermore, linear regression was conducted to investigate how access could influence performance. The results are statistically significant F = 172.604, p= 0.000. In addition, this implies that the linear regression between market procedural improvement and banks performance attitude and bank performance depicts positive and direct significant relationship for 56.5%.

Table: 4.15 Regression between Market Procedural Improvement and Banks Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752	.565	.562	.34595

Table: 4.16 Regression between Market Procedural Improvement and Banks Performance

ANOVA						
	Sum of squares	df	mean square	f	t	Sig
Regression	20.658	1	20.658	172.604	13.138	.000
Residual	15.918	133	.120			
Total	36.576	134				

R Square =.565 Standardized Coefficients Beta=.752

4.6.5 Regression between Employee Support and Banks Performance

In order to answer the five research objective that is "to determine the relationship between employee support and bank performance" Regression analysis was conducted to test **hypotheses 5**. In this analysis, employee support is treated as the independent variable, whereas bank performance as the dependent variable, through regression analysis procedures.

The result in Table: 4.17 and 4.18 shows a positive and significant relationship between employee support and banks performance (t = 34.136, p =000). (See Appendix E) The result suggests that employee support increase customer bank performance; there is an expected increase of .939 in the performance. Therefore, **H 5** is supported. Furthermore, linear regression was conducted to investigate how access could influence performance. The results are statistically significant F = 1165.270, p= 0.000. In addition, this implies that the linear regression between employee support and bank performance depicts positive and direct significant relationship for 89.8%.

Table: 4.17 Regression between Employee Support and Banks Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947(a)	.898	.897	.16785

Table: 4.18 Regression between Employee Support and Banks Performance

ANOVA						
	Sum of squares	df	mean square	f	t	Sig
Regression	32.829	1	32.829	1165.270	34.136	.000
Residual	3.747	133	.028			
Total	36.576	134				

R Square =.898 Standardized Coefficients Beta=.947

4.6.6 Regression between Customer Knowledge and Banks Performance

In order to answer the six research objective that is "to determine the relationship between customer knowledge and bank performance" Regression analysis was conducted to test **hypotheses 6**. In this analysis, customer knowledge is treated as the independent variable, whereas bank performance as the dependent variable, through regression analysis procedures.

The result in Table: 4.19 and 4.20 shows a positive and significant relationship between market procedural improvement and banks performance (t = 18.346, p =000). (See Appendix E) The result suggests that market procedural improvement increase customer bank performance; there

is an expected increase of .871 in the performance. Therefore, **H 6** is supported. Furthermore, linear regression was conducted to investigate how access could influence performance. The results are statistically significant F = 336.565, p= 0.000. In addition, this implies that the linear regression between market procedural improvement and banks performance depicts positive and direct significant relationship for 71.7%.

Table: 4.19 Regression between Customer Knowledge and Banks Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847(a)	.717	.715	.27909

Table: 4.20 Regression between Customer Knowledge and Banks Performance

ANOVA

	Sum of squares	df	mean square	f	t	Sig
Regression	26.216	1	26.216	336.656	18.346	.000(a)
Residual	10.360	133	.078			
Total	36.576	134				

R Square =.717 Standardized Coefficients Beta=..847

4.6.7 Regression between Market responsiveness and Banks Performance

In order to answer the seven research objective that is "to determine the relationship between market responsiveness and bank performance" Regression analysis was conducted to test **hypotheses 7**. In this analysis, market responsiveness is treated as the independent variable, whereas bank performance as the dependent variable, through regression analysis procedures.

The result in Table: 4.21 and 4.22 shows a positive and significant relationship between market responsiveness and banks performance (t = 13.138, p =000). (See Appendix E) The result suggests that market responsiveness increase customer bank performance; there is an expected increase of .879 in the performance. Therefore, **H 7** is supported. Furthermore, linear regression was conducted to investigate how access could influence performance. The results are statistically significant F = 172.604, p= 0.000. In addition, this implies that the linear regression between market responsiveness banks performance depicts positive and direct significant relationship for 56.5%.

Table: 4.21 Regression between Market responsiveness and Banks Performance
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752(a)	.565	.562	.034595

Table: 4.22 Regression between Market responsiveness and Banks Performance

ANOVA						
	Sum of squares	df	mean square	f	t	Sig
Regression	20.658	1	20.658	172.604	13.138	.000(a)
Residual	15.918	133	.120			
Total	36.576	134				

R Square =.989 Standardized Coefficients Beta=.994

Table: 4.23 Summary of the Direct Relationships' Hypothesis Result

Hypothesis	**Independent variable**	**Dependent Variable**	**Result**	**Explanation**
H1	ATT	BP	**Asserted**	Positive influence
H2	EOU	ATT	**Asserted**	Positive influence
H3	USE	ATT	**Asserted**	Positive influence
H4	MRI	BP	**Asserted**	Positive influence
H5	ES	BP	**Asserted**	Positive influence
H6	CK	BP	**Asserted**	Positive influence
H7	MR	BP	**Asserted**	Positive influence

4.7 Summary

With the use of the data of respondents, the multiple-items were subjected to series of reliability checks. The reliability check of items that correspond to each theoretical construct for the multi-item scale was subjected to the Cronbach's alpha, item to total correlation. Therefore all measures appeared to be reliable, internally consistent, unidimentional and valid for the analysis.

The result collated from correlation, regression and the multiple regression in showing the empirical relationship between the ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge and market responsiveness were all positively related to Bank performance. The positive relationship of the market procedural improvement, employee support, and customer knowledge and market responsiveness to bank performance validates the importance of the effectiveness of MkIS usage in the bank to the overall banking performance. This gives a rather holistic view of the effectiveness of MkIS (Gounaris et al., 2007).

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

The discussions based on the finding through statistical analysis are discussed in this chapter. We conducted the research in an explanatory manner. The analysis has revealed the role of ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge, market responsiveness in the banking performance.

5.2 DISCUSSION OF FINDINGS

1. The objectives of this study were: (1) To determine the relationship between Ease of use and attitude (2) To determine the relationship between Usefulness and attitude (3) To determine the relationship between attitude and bank performance (4) To determine the market procedural improvements and bank performance (5) To determine the employee

Support and bank performance (6) To determine the customer knowledge and bank performance (7) To determine the market Responsiveness and bank performance.

To answer the objectives of research, some effective factors were extracted from related theories to adoption of new technology, one of which is technology acceptance theory (Davis, 1989) and organization effectiveness which is a grounded version of organization theory (Quinn &Rohrbaugh, 1983). Based on the derived factors, the research model for the study was designed. The study focused on the role of MkIS on banking performance. The Lockett and Littler's (1997) questionnaire on technology adoption and Gounaris et al (2007) questionnaire on effectiveness of MkIS were adapted. The sample was drawn from marketing managers in Jordanian banks.

Based on the results of the study which were obtained from bivariate and motivational statistical methods. The effective factors that determine the role of MkIS in bank performance were identified. The factors consist of non economic relative advantages such as age, cost,social character and attitude toward information systems. The economic relative advantages consist of return on investment, sales growth, customer and market information. According to the results practical implications for banks can be derived.

5.3 Contributions of the Research

The findings of this study has important implications for research and banking sector in Jordan, the banks that makes use of MkIS for customer and market information in order to improve their

customer service, or those who do not use the system and are planning to implement the system. They will benefit from this study in terms of future evidence with the appropriate use of Lockett and Littler's (1997) model and Gounaris et al (2007) model to measure the "personal characteristics of adopters" and "perceived characteristics of MkIS" and the "effectiveness of MkIS". However unlike some other studies much emphasis was not made on demographic characteristics in this research.

5.4 Discussion and Recommendations:

One of the initial steps in conducting applied research is to identify the needs of Information Systems practitioners. The proper identification of issues in the study makes us to acknowledge the importance of the role of factors like ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge and market responsiveness in the usage of MkIS towards the performance of banking system. The fact that 70.6% of the respondent in the study owns a degree shows a high level of literacy in the use of the marketing information system. This explains the reason why the attitude towards the usage is also positive as the use of the system is much importance to employee job satisfaction and increased productivity which invariable increases the performance of the bank. The result of correlation, the regression and multiple regressions in assessing the variables or the empirical relationship between ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge and market responsiveness were positively related to bank performance has hypothesized.

The positive associations between all independent variables ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge and market responsiveness was supported. From the results the study supports the inclusion of the factors that influences the role of MkIS in the performance of banks. Results from the study shows that ease of use, usefulness and attitude are significant determinants of usage of MkIS while market procedural improvement, employee support, customer knowledge and market responsiveness are significant determinants of the effectiveness of MkIS in the banks to improve the banking operation performance.

However the study also reveals the benefit to the marketing function of developing and using MkIS because the use of MkIS can improve organization ability to process information quickly from various internal sources within the bank (Van Bruggen et al., 2001). Such occurrence will facilitate prompt decision making and it will make the employees in the marketing department to respond faster to customer's needs and expectation, because they have a clear details of them (Talvinen& Saarinen, 1995; Kelley, 1993).

5.5 Implications

This study shows that there exist a positive relationship between ease of use, usefulness, attitude, market procedural improvement, employee support, customer knowledge, market responsiveness and the performance of the banks that operates in Jordan. It also exist that market procedural improvement, employee support, customer knowledge and market responsiveness forms the

major factors that affect the effectiveness of the MkIS in the banking organization to yield a return on investments. Overall, the factors identified are in line with findings reported in previous studies mentioned earlier in the paper.

Evidence also indicates that there are greater efforts on the part of banks to promote the usage of MkIS in the industry. The attitude towards usage of the MkIS is not surprising due to the level of education, years of experience using MkIS and the age group of most of the managers that are involved in the sample. The demographic differences between the users of MkIS were not very evident in this study, particularly with reference to age and educational background. This could be as a result of the years of experience at which most of the respondents has with using MkIS in Jordan. However, there are certain limitations in this study.

5.6 Limitation of the Study

Although this explanatory research has revealed some interesting results, it is to be noted that there are quite a number of limitations. Some of which are:

1. The population of the sample was limited to Jordanian bank managers which has affect of the generalization of the finding on all users of MkIS in sector.
2. The data were collected during February 2010.
3. The investigation is to performance of banks using MkIS, there are other performance mediums that can be explored.
4. The size of the banks in the sample was not considered.

5. The questionnaire was designed for user of MkIS, the respondents who uses MkIS in banking organization for decision making. The respondents who do not use the information system often may have certain difficulties in understanding some questions. So the answers of those questions may have been answered improperly.

5.7 Recommendations for Further Research

The limitation of this study has provided its implication for future research. The conducted study with random sampling gives a glaring picture of the factors that influences the role of MkIS in the performance of banks in Jordan. Since the study has focused on some factors that influence the role of MkIS in the performance of banks in Jordan, other factors could be explored. The level of adoption also could be investigated.

It is also suggested that future research could be done in different geographical location in the country with indebt analysis and make a comparison with the result obtained in this study. Since this study is on the role of MkIS on the performance of banks with views from the managers, it could also be extended to market analyst and retail marketers that make contacts with customers on a daily basis.

Further study could also make comparison between the usage of the MkIS at the lower management level and upper management level to discover the factors that influences the effectiveness of the marketing information system and the disparity in the behavior of the lower management level staffs and the upper management level staffs.

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APPENDIX

A

QUESTIONNAIRE

COLEGE of BUSINESS

UNIVERSITI UTARA MALAYSIA

Dear Participant,

The general purpose of this research will to find out whether a relationship between usefulness, ease of use, marketing procedural improvement, employee support, customer knowledge, and the market responsiveness and the marketing performance of Jordanian banks. The main interest of the survey is to study the role of marketing information system (MkIS) to improve marketing performance in the banking sector of Jordan.

Your response will be kept as STRICLY CONFIDENTIAL, and for the purpose of academic research only. Thank you very much for your cooperation and prompt feedback.

Regards,

BASHAR ISSA AL KHAWALDEH

THE ROLE OF MARKETING INFORMATION SYSTEM (MkIS) TO IMPROVE MARKETING PERFORMANCE IN THE BANKING SECTOR OF JORDAN

PART 1

(SECTION A):

(This section intends to get information the respondents' demographic background).

(Tick the box for the answer that best describes you).

1. Gender
   - ☐ 1. (Male)
   - ☐ 2. (Female)

2. Please state your age?
   - ☐ 1. 18-22 years
   - ☐ 2. 23-27 years
   - ☐ 3. 28-32 years
   - ☐ 4. 33-40 years
   - ☐ 5. above 40 years

3. Years of marketing experience:
   - ☐ 1. One year
   - ☐ 2. 2-4 years
   - ☐ 3. 5-7 years
   - ☐ 4. More than 8 years

4. How long have you been using MkIS?
   - ☐ 1. Less than 1 month
   - ☐ 2. 2-4 years
   - ☐ 3. 5-7 years
   - ☐ 4. More than 8 years

5. Marital Status:

☐ 1. Single

☐ 2. Married

6. Education Background

☐ 1. Diploma
☐ 2. First Degree
☐ 3. Master
☐ 4. PhD

PART TWO

Definition of scale:
1 – Strongly Disagree. 2 – Disagree. 3 – Neutral. 4 – Agree. 5 – Strongly Agree.

Section-A. EASE OF USE

EOU1	*Assuming I had access to MkIS, I intend to use it.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
EOU2	*Given that I had access to MkIS, I predict that I would use it*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
EOU3	*I will use MkIS in the future.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
EOU4	*Using the MkIS improves my task*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
EOU5	*Using the MkIS increases my productivity*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
EOU6	*Learning to utilize MkIS would be easy for me*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
EOU7	*Using MkIS enhances effectiveness in my task*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-B. USEFULNESS

USE1	*Using MkIS enhances my effectiveness in my task*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
USE 2	*MkIS makes marketing services effective.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
USE 3	*MkIS makes the banking transactions faster*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
USE4	*Getting information from MkIS is usefulness for my business*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
USE5	*I would be willing to run my market analysis using MkIS*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
USE6	*I find MkIS to be useful*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
USE7	*Using MkIS would enable me to accomplish tasks more quickly.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-C. ATTITUDE

ATT 1	*MkIS is important to my job*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ATT 2	*MkIS is relevant to my job*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ATT 3	*I found MkIS trifling*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ATT 4	*MkIS is interesting*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ATT 5	*I found MkIS is attractive*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-D. MARKETING PROCEDURAL IMPROVEMENT

MPI 1	*MkIS helps us to improve control of marketing programs*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
MPI 2	*MkIS helps us to improve marketing plan activities*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
MPI 3	*MkIS helps us to create efficient marketing report*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
MPI 4	*MkIS helps us to improve decision making*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-E. EMPLOYEE SUPPORT

ES1	*MkIS helps us to develop efficient marketing activities(time saving and lower level of routine work)*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ES2	*MkIS helps us to develop better service to customers*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ES3	*MkIS helps us to get better services to the customers.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
ES4	*MkIS helps us to get better feedback of the market*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-F. CUSTOMER KNOWLEDGE

CK1	*MkIS helps us to improve our customer satisfaction*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
CK2	*MkIS helps us to increase our sales volume*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
CK3	*MkIS helps us to improve communication between the marketing department personnel*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
CK4	*MkIS helps us to reduce cost of marketing program*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-G. MARKET RESPONSIVENESS

MkR1	*MkIS helps us to acquire valuable knowledge of our customers needs*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
MkR 2	*MkIS helps us to launch more quickly new services in the market*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
MkR 3	*MkIS helps us to increase sales promotion services*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
MkR 4	*MkIS helps us to improve our marketing research (online surveys)*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Section-H. BANK PERFORMANCE

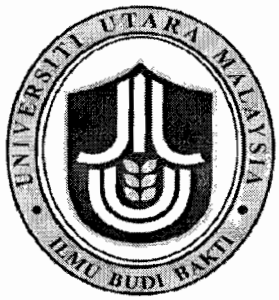
BP1	*MkIS assist us to achieve a good return on investment.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BP2	*The use of MkIS makes us to have a significant and positive margin on sales volume*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BP3	*MkIS assist the bank in capacity utilization.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BP4	*MkIS assist the bank in satisfying the customers.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BP5	*The use of MkIS improves our product/services quality.*	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Thank You

APPENDIX

B

QUESTIONNAIRE



University Utara Malaysia

COLLEGE OF BUSINESS

MkIS

ملاحظة : ضع رمز (✓) أمام الإختيار الصحيح .

- **أولا: المعلومات الشخصية: يرجى ملأ جميع المعلومات الشخصية بدقة :-**

1- الجنس: ☐ ذكر ☐ أنثى

2- العمر: ☐ من 18 – 29 سنة ☐ من 30 – 39 سنة

☐ من 40 – 49 سنة ☐ من 50 سنة فما فوق

3- الحالة الاجتماعية: ☐ اعزب ☐ متزوج

4- المؤهل العلمي: ☐ أقل من الثانوية ☐ دبلوم

☐ جامعي ☐ دراسات عليا

5- خبرتك في مجال التسويق: ☐ من سنة – 4 سنوات ☐ من5 سنوات – 9سنوات

☐ من 10 سنوات – 19 سنة ☐ من 20 سنة فما فوق

6- مدة استخدامك لنظام المعلومات االتسويقية:

☐ سنه ☐ من 2 – 4 سنوات

☐ اكثرمن 8 سنوات ☐ من5 – 7 سنوات

ثانيا: فقرات الاستبيان :-

1. وضع علامة (✓) أمام الإجابة التي ترى أنها تعبر عن رأيك بصراحة.
2. عدم وضع أكثر من أجابه عند اختيارك الرأي المناسب.

الرقم	EASE OF USE	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
1	اذا كانت MkIS متاحة في الشركة افضل استخدامها	☐1	☐2	☐3	☐4	☐5
2	اذا تمكنت من استخدامMkIS سوف استخدمها	☐1	☐2	☐3	☐4	☐5
3	انا سوف استخدم MkIS في المستقبل ان لم تكن متوفرة حاليا	☐1	☐2	☐3	☐4	☐5
4	بأستخدام MkISتحسن ادائي في انجاز المهام	☐1	☐2	☐3	☐4	☐5
5	بأستخدام MkISتزيد من انتاجي	☐1	☐2	☐3	☐4	☐5
6	تعلم كيفية استخدام MkIS يعتبر سهل بالنسبة لي	☐1	☐2	☐3	☐4	☐5
7	بأستخدام MkISيحفزني على أداء المهام	☐1	☐2	☐3	☐4	☐5

الرقم	USEFULNESS	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
8	بأستخدام MkISتعزز فعاليتي في أداء المهام	☐1	☐2	☐3	☐4	☐5
9	MkISتقدم خدمات تسويقية فعاله	☐1	☐2	☐3	☐4	☐5
10	MkISتقود الى انجاز المعاملات المصرفية بشكل اسرع	☐1	☐2	☐3	☐4	☐5
11	الحصول على المعلومات من MkIS يعود على العمل بالفائدة	☐1	☐2	☐3	☐4	☐5
12	انا ارغب بأستتخدام التحليل التسويقي من خلال استخدام MkIS	☐1	☐2	☐3	☐4	☐5
13	انا اجد MkIS ذات فائدة	☐1	☐2	☐3	☐4	☐5
14	بأستخدام MkIS يمكني من انجاز المهام بسرعة اكبر	☐1	☐2	☐3	☐4	☐5

الرقم	ATTITUDE	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
15	MkIS مهمة في وظيفتي	☐1	☐2	☐3	☐4	☐5
16	MkIS ذات صلة في وظيفتي	☐1	☐2	☐3	☐4	☐5
17	انا وجدت MkIS عديم الفائدة	☐1	☐2	☐3	☐4	☐5
18	MkIS تعتبر مثير للاهتمام	☐1	☐2	☐3	☐4	☐5
19	انا وجدت أن MkIS محبب للاستخدام	☐1	☐2	☐3	☐4	☐5

الرقم	MARKETING PROCEDURAL IMPROVEMENT	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
20	MkISتساعدنا على تحسين الرقابة على برامج التسويق	☐1	☐2	☐3	☐4	☐5
21	MkISتساعدنا على تحسين أنشطة الخطط التسويقية	☐1	☐2	☐3	☐4	☐5
22	MkISتساعدنا على أنشاء تقارير تسويقية ذات كفاءة	☐1	☐2	☐3	☐4	☐5
23	MkISتساعدنا على تحسين عملية اتخاذ القرارات	☐1	☐2	☐3	☐4	☐5

الرقم	EMPLOYEE SUPPORT	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
24	MkISتساعدنا على تطوير كفاءة الانشطة التسويقية من حيث توفير الوقت وتخفيض مستوى العمل الروتيني	☐1	☐2	☐3	☐4	☐5
25	MkISتساعدنا على تقديم خدمة افضل للعملاء	☐1	☐2	☐3	☐4	☐5
26	MkISتساعدنا في الحصول على خدمات افضل للعملاء	☐1	☐2	☐3	☐4	☐5
27	MkISتساعدنا في الحصول على تغذية الراجعة افضل من السوق	☐1	☐2	☐3	☐4	☐5

الرقم	CUSTOMER KNOWLEDGE	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
28	MkISتساعدنا على تحسين مستوى رضا العملاء	☐1	☐2	☐3	☐4	☐5
29	MkISتساعدنا على زيادة حجم مبيعاتنا	☐1	☐2	☐3	☐4	☐5
30	MkISتساعدنا على تحسين الاتصال بين العاملين في قسم التسويق	☐1	☐2	☐3	☐4	☐5
31	MkISتساعدنا على تخفيض تكلفة البرامج التسويقية	☐1	☐2	☐3	☐4	☐5

الرقم	MARKET RESPONSIVENESS	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
32	MkIS تساعدنا على اكتساب معرفة جيدة عن احتياجات عملائنا	☐1	☐2	☐3	☐4	☐5
33	MkISتساعدنا على اطلاق خدمات جديدة بسرعة اكبر في السوق	☐1	☐2	☐3	☐4	☐5
34	MkISتساعدنا على زيادة المبيعات وخدمات الترويج	☐1	☐2	☐3	☐4	☐5
35	MkISتساعدنا على تحسين قدرتنا على البحوث التسويق من حيث الاستقصاءات على شبكة الانترنت	☐1	☐2	☐3	☐4	☐5

الرقم	BANK PERFORMANCE	موافق بشدة	موافق	غير متأكد	غير موافق	غير موافق بشدة
36	MkIS تساعدنا على تحقيق عوائد جيدة على الأستثمار	☐1	☐2	☐3	☐4	☐5
37	أستخدام MkISلها أثر ايجابي على حجم المبيعات	☐1	☐2	☐3	☐4	☐5
38	MkISتساعد البنك على الأستفادة من قدرات الموظفين	☐1	☐2	☐3	☐4	☐5
39	MkISتساعد البنك على أرضاء العملاء	☐1	☐2	☐3	☐4	☐5
40	استخدام MkISيحسن جودة الخدمات والمنتجات	☐1	☐2	☐3	☐4	☐5

ولكم جزيل الشكر

APPENDIX

C

RELIABILITY OF VARAIBLES

1. EASY OF USE

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.772	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EOU0001	26.9185	6.016	.505	.742
EOU0002	26.6741	6.087	.368	.770
EOU0003	26.6296	5.533	.578	.726
EOU0004	26.2444	6.111	.517	.742
EOU0005	26.5704	5.710	.630	.719
EOU0006	26.7556	5.723	.346	.788
EOU0007	26.6074	5.628	.626	.718

2. USEFULNESS

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.843	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
USE1	26.6148	6.851	.744	.797
USE2	26.5333	7.176	.665	.811
USE3	26.3778	7.535	.712	.808
USE4	26.2222	9.353	.067	.892
USE5	26.6000	6.884	.726	.801
USE6	26.5259	7.221	.648	.814
USE7	26.3704	7.548	.707	.808

3. ATTITUDE

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.743	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ATT1	18.0889	2.917	.622	.651
ATT2	17.7037	3.553	.449	.719
ATT3	18.0296	3.044	.691	.636
ATT4	18.2148	3.155	.315	.796
ATT5	18.0667	3.182	.564	.678

4. MARKETING PROCEDURAL IMPROVEMENT

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedur

Reliability Statistics

Cronbach's Alpha	N of Items
.783	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MPI1	13.5556	2.070	.010	.903
MPI2	13.9481	.990	.899	.545
MPI3	14.0370	1.066	.630	.719
MPI4	13.9481	1.020	.856	.572

5. EMPLOYEE SUPPORT

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.844	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ES1	13.1778	2.670	.590	.844
ES2	13.0963	2.371	.805	.745
ES3	12.9407	3.101	.544	.855
ES4	13.0963	2.371	.805	.745

6. CUSTOMER KNOWLEDGE

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.703	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CK1	12.9926	2.589	.493	.637
CK2	12.9111	2.261	.723	.494
CK3	12.9407	3.101	.148	.855
CK4	12.9111	2.261	.723	.494

7. MARKET RESPONSIVENESS

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.746	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MKR1	13.7556	1.783	.522	.705
MKR2	13.5778	1.664	.697	.589
MKR3	13.1926	2.515	.268	.811
MKR4	13.5185	1.834	.721	.591

8. BANK PERFORMANCE

Case Processing Summary

		N	%
Cases	Valid	135	100.0
	Excluded[a]	0	.0
	Total	135	100.0

a. Listwise deletion based on all variables in the procedure

Reliability Statistics

Cronbach's Alpha	N of Items
.846	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BP1	17.5259	4.027	.599	.846
BP2	17.5037	4.625	.850	.777
BP3	17.6741	4.460	.662	.812
BP4	17.5926	4.467	.689	.805
BP5	17.4370	5.099	.581	.834

APPENDIXS

D

CORRELATION

Correlations

		EOU	MeanUSE1	ATT	MRI	ES	CK	MeanMKR	BP
EOU	Pearson Correlation	1	.536**	.657**	.289**	.351*	.444**	.625**	.311**
	Sig. (2-tailed)		.000	.000	.00	.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
MeanUSE1	Pearson Correlation	.536**	1	.677**	.63 **	.587*	.687**	.517**	.528**
	Sig. (2-tailed)	.000		.000	.00	.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
ATT	Pearson Correlation	.657**	.677**	1	.60 **	.645*	.693**	.475**	.607**
	Sig. (2-tailed)	.000	.000		.00	.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
MRI	Pearson Correlation	.289**	.638**	.608**	1	.695*	.511**	.692**	.558**
	Sig. (2-tailed)	.001	.000	.000		.000	.000	.000	.000
	N	135	135	135	135	135	135	13	135
ES	Pearson Correlation	.351**	.587*	.645**	.695**	1	.591**	.677**	.638**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	135	135	135	135	135	135	13	135
CK	Pearson Correlation	.444**	.687*	.693**	.511**	.591**	1	.700**	.594**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	135	135	135	135	135	135	13	135
MeanMKR	Pearson Correlation	.625**	.517*	.475**	.692**	.677**	.700**	1	.572**
	Sig. (2-tailed)	.000	.000	.000	.000	.00	.000		.00
	N	135	135	135	135	135	135	135	135
BP	Pearson Correlation	.311**	.528**	.607**	.558**	.63 **	.594**	.572**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	135	135	135	135	135	135	135	135

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

APPENDIX

E

Regression

1. EASY OF USE AND ATTITUDE

Descriptive Statistics

	Mean	Std. Deviation	N
ATT	4.5052	.43147	135
EOU	4.4032	.37670	135

Correlations

		ATT	EOU
Pearson Correlation	ATT	1.000	.709
	EOU	.709	1.000
Sig. (1-tailed)	ATT	.	.000
	EOU	.000	.
N	ATT	135	135
	EOU	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	EOU[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: ATT

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709[a]	.503	.499	.30533

a. Predictors: (Constant), EOU

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.547	1	12.547	134.594	.000[a]
	Residual	12.399	133	.093		
	Total	24.946	134			

a. Predictors: (Constant), EOU

b. Dependent Variable: ATT

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.928	.309		3.000	.003		
	EOU	.812	.070	.709	11.601	.000	1.000	1.000

a. Dependent Variable: ATT

Coefficient Correlations[a]

Model			EOU
1	Correlations	EOU	1.000
	Covariances	EOU	.005

a. Dependent Variable: ATT

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	Variance Proportions EOU
1	1	1.996	1.000	.00	.00
	2	.004	23.507	1.00	1.00

a. Dependent Variable: ATT

2. USEFULNESS AND ATTITUDE

Descriptive Statistics

	Mean	Std. Deviation	N
ATT	4.5052	.43147	135
USE	4.4381	.39499	135

Correlations

		ATT	USE
Pearson Correlation	ATT	1.000	.956
	USE	.956	1.000
Sig. (1-tailed)	ATT	.	.000
	USE	.000	.
N	ATT	135	135
	USE	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	USE[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: ATT

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956[a]	.914	.914	.12681

a. Predictors: (Constant), USE

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.808	1	22.808	1418.322	.000[a]
	Residual	2.139	133	.016		
	Total	24.946	134			

a. Predictors: (Constant), USE

b. Dependent Variable: ATT

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.130	.124		-1.055	.293		
	USE	1.044	.028	.956	37.661	.000	1.000	1.000

a. Dependent Variable: ATT

Coefficient Correlations[a]

Model			USE
1	Correlations	USE	1.000
	Covariances	USE	.001

a. Dependent Variable: ATT

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	USE
1	1	1.996	1.000	.00	.00
	2	.004	22.600	1.00	1.00

a. Dependent Variable: ATT

3. ATTITUDE AND BANK PERFORMANCE

Descriptive Statistics

	Mean	Std. Deviation	N
BP	4.3867	.52245	135
ATT	4.5052	.43147	135

Correlations

		BP	ATT
Pearson Correlation	BP	1.000	.607
	ATT	.607	1.000
Sig. (1-tailed)	BP	.	.000
	ATT	.000	.
N	BP	135	135
	ATT	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	ATT[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.607[a]	.369	.364	.41657

a. Predictors: (Constant), ATT

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.497	1	13.497	77.780	.000[a]
	Residual	23.079	133	.174		
	Total	36.576	134			

a. Predictors: (Constant), ATT

b. Dependent Variable: BP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.073	.377		2.842	.005		
	ATT	.736	.083	.607	8.819	.000	1.000	1.000

a. Dependent Variable: BP

Coefficient Correlations[a]

Model			ATT
1	Correlations	ATT	1.000
	Covariances	ATT	.007

a. Dependent Variable: BP

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	ATT
1	1	1.995	1.000	.00	.00
	2	.005	21.008	1.00	1.00

a. Dependent Variable: BP

4. MARKETING PROCEDURAL IMPROVEMENT AND BANK PERFORMANCE

Descriptive Statistics

	Mean	Std. Deviation	N
BP	4.3867	.52245	135
MRI	4.6241	.36507	135

Correlations

		BP	MRI
Pearson Correlation	BP	1.000	.744
	MRI	.744	1.000
Sig. (1-tailed)	BP	.	.000
	MRI	.000	.
N	BP	135	135
	MRI	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	MRI[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.744[a]	.554	.551	.35022

a. Predictors: (Constant), MRI

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.263	1	20.263	165.210	.000[a]
	Residual	16.313	133	.123		
	Total	36.576	134			

a. Predictors: (Constant), MRI

b. Dependent Variable: BP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.539	.384		-1.402	.163		
	MRI	1.065	.083	.744	12.853	.000	1.000	1.000

a. Dependent Variable: BP

Coefficient Correlations[a]

Model			MRI
1	Correlations	MRI	1.000
	Covariances	MRI	.007

a. Dependent Variable: BP

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	MRI
1	1	1.997	1.000	.00	.00
	2	.003	25.466	1.00	1.00

a. Dependent Variable: BP

5. EMPLOYEE SUPPORT AND BANK PERFORMANCE

Descriptive Statistics

	Mean	Std. Deviation	N
BP	4.3867	.52245	135
ES	4.3593	.52690	135

Correlations

		BP	ES
Pearson Correlation	BP	1.000	.947
	ES	.947	1.000
Sig. (1-tailed)	BP	.	.000
	ES	.000	.
N	BP	135	135
	ES	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	ES[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947[a]	.898	.897	.16785

a. Predictors: (Constant), ES

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.829	1	32.829	1165.270	.000[a]
	Residual	3.747	133	.028		
	Total	36.576	134			

a. Predictors: (Constant), ES

b. Dependent Variable: BP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.292	.121		2.413	.017		
	ES	.939	.028	.947	34.136	.000	1.000	1.000

a. Dependent Variable: BP

Coefficient Correlations[a]

Model			ES
1	Correlations	ES	1.000
	Covariances	ES	.001

a. Dependent Variable: BP

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	ES
1	1	1.993	1.000	.00	.00
	2	.007	16.669	1.00	1.00

a. Dependent Variable: BP

6. CUSTOMER KNOWLEDGE AND BANK PERFORMANCE

Descriptive Statistics

	Mean	Std. Deviation	N
BP	4.3867	.52245	135
CK	4.3130	.50807	135

Correlations

		BP	CK
Pearson Correlation	BP	1.000	.847
	CK	.847	1.000
Sig. (1-tailed)	BP	.	.000
	CK	.000	.
N	BP	135	135
	CK	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	CK[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847[a]	.717	.715	.27909

a. Predictors: (Constant), CK

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.216	1	26.216	336.565	.000[a]
	Residual	10.360	133	.078		
	Total	36.576	134			

a. Predictors: (Constant), CK

b. Dependent Variable: BP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.632	.206		3.066	.003		
	CK	.871	.047	.847	18.346	.000	1.000	1.000

a. Dependent Variable: BP

Coefficient Correlations[a]

Model			CK
1	Correlations	CK	1.000
	Covariances	CK	.002

a. Dependent Variable: BP

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	CK
1	1	1.993	1.000	.00	.00
	2	.007	17.100	1.00	1.00

a. Dependent Variable: BP

7. MARKET RESPONSIVENESS AND BANK PERFORMANCE

Descriptive Statistics

	Mean	Std. Deviation	N
BP	4.3867	.52245	135
MR	4.3759	.53764	135

Correlations

		BP	MR
Pearson Correlation	BP	1.000	.994
	MR	.994	1.000
Sig. (1-tailed)	BP	.	.000
	MR	.000	.
N	BP	135	135
	MR	135	135

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	MR[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994[a]	.989	.989	.05571

a. Predictors: (Constant), MR

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.163	1	36.163	11651.87	.000[a]
	Residual	.413	133	.003		
	Total	36.576	134			

a. Predictors: (Constant), MR

b. Dependent Variable: BP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.158	.039		4.016	.000		
	MR	.966	.009	.994	107.944	.000	1.000	1.000

a. Dependent Variable: BP

Coefficient Correlations[a]

Model			MR
1	Correlations	MR	1.000
	Covariances	MR	8.0E-005

a. Dependent Variable: BP

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	MR
1	1	1.993	1.000	.00	.00
	2	.007	16.400	1.00	1.00

a. Dependent Variable: BP