

The current status of Marketing Information Systems in Jordanian Banking Industry: qualitative evidence

Ghazi A. Al-Weshah Jonathan H. Deacon Andrew Thomas

Abstract

This paper aims to provide deeper understanding of the current status of MKIS in the Jordanian banking industry. More specifically, the study objective is to identify MKIS concept, bank managers' satisfactions, and the major tasks (functions) of MKIS in improving the banking performance

Methodologically, a qualitative approach using case study method is employed to analyse the data generated by purposive selected interviews. Moreover, two- phase analysis is adopted by the study; initially each interview will be analysed independently. The second phase is cross interviews analysis to show the holistic view of case study analysis.

The study concludes that MKIS banks managers do not completely satisfy about the current status of MKIS due to lack of system automation and poor coordination among banks departments. However, MKIS plays some important roles though its different tasks such as providing the appropriate information to its users.

The study recommends that top management should support and believe in MKIS capabilities for developing banks performance. Moreover, effective training programs are needed for MKIS users to take advantage of MKIS output. Moreover, matching between MKIS output and its beneficiaries should be considered as primary issues. Furthermore, more coordination is needed among MKIS developers and analysts, marketing departments, and other department in banks as a foundation and feedback for future development of MKIS.

The study background

Broadly speaking, companies attempt to find a technique that monitors the marketing environment in order to provide decision makers with information they should have to make key marketing decisions. This technique is called a marketing information system (MKIS). Marketing information system (MKIS) consists of people, equipment and procedures to gather, sort, analyse, evaluate, and distribute accurate information in a timely manner that is useful for marketing decision makers (Kotler and Armstrong, 2001).

Many companies are reported to be not fully exploiting the latest information technologies to create competitive advantages. Simultaneously, many marketing managers are not satisfied with their MKIS. Moreover, there is a need to ascertain the current practice of MKIS in supporting marketing strategic function and enhance organisation's strategic capacity (Xu, 1999).

To handle the increasing external and internal information flow and to improve its quality, banks need to take advantage of the opportunities offered by modern information technology (IT) and information systems (IS). There is ample evidence that it is increasingly important for organisations to make effective use of IT to support marketing management (Nelson, 1999).

Marketing information management by means of IT has become one of the most vital elements of effective marketing. Marketing information system technology is IT within marketing information. Today most financial institutions contain some IT in their marketing information systems (Colgate, 1998). Information systems have demonstrated the ability to gather, filter, and analyse data and subsequently communicate information (Li *et al.* 2000). Marketing information system (MKIS) is an essential tool for translating raw data to useful information (O'Brien *et al.* 1995).

Therefore, banking industry publications from 1970 onwards provide little evidence of banks having information systems capable of supporting the marketing needs. Simultaneously, other industries have had great success in developing effective marketing information systems (Nelson, 1999).

Unfortunately, non-banks have often been better at taking advantage of new technologies to capture market share from retail banks.

Particularly in Jordan, banks in Jordan are one of the largest investors in the fields of information systems (IS). Moreover, there are many indications that these trends to continue in the future. However, there is a concern among CEOs and top managers of Jordanian banks that the information systems investments are not yielding the anticipated outcomes yet (Mashhour and Zaatreh, 2008).

In fact, the Jordanian banks need to exploit their marketing information systems effectively for avoiding poor adoption of marketing information system outputs by decision makers. Moreover, most efforts in banks only focus on technical development of marketing information system. Little attention has been paid to MKIS activities and role in supporting and developing the banking industry performance. Particularly, how MKIS outputs contribute to banking industry.

Consequently, the current study investigates the current status of MKIS in Jordanian banking industry to find out its concept, major roles, and satisfaction level about MKIS from managers perspectives.

Aims of the study

The aim of this study is to provide deeper understanding of the role of MKIS in Jordanian banking industry. More specifically, identify and describe the current status of MKIS in Jordanian banks. In addition to the main aim, the purpose of the current study is to:

- Propose a conceptual definition of MKIS from the banks managers perspectives.
- Identify the satisfaction level about MKIS performance in Jordanian banking industry
- Describe the major tasks (functions) of MKIS in Jordanian banks.
- Propose practical recommendations and implications for banks managers in Jordan to develop the MKIS performance.

Marketing information systems- literature overview

The first definition of marketing information systems was offered by Cox and Good (1967), MKIS was defined as a set of procedures and methods for planning and presenting information required in taking marketing related decisions. Many authors (Brien and Stafford 1968, Smith *et al.* 1968, and Buzzell *et al.* 1969) further developed this definition by dividing marketing information into three categories, namely, control, planning, and research information. They mentioned that process of developing timely and pertinent data for MKIS is simply rather than marketing research. They defined MKIS as interacting complex of persons, machine and procedures designed to generate a flow of pertinent information, collected from different sources for use as base of decision making in the marketing management area. However, this definition restricted the use of MKIS for the marketing management (Smith *et al.* 1968). However, Uhl (1974) pointed out that a definition of a MKIS is a difficult task. Particularly, if you prescribe it to the notion that there is no one MKIS that will serve all organisations because of the unique information requirements of different organisations.

Jobber and Rainbow (1977) defined MKIS as a system in which marketing information is formally gathered, stored, analysed, and distributed to managers in accordance with their informational needs on regularly planned basis. According to this definition, the MKIS is built on the identifying information needs for marketing manager to present relevant information when, how and where that manager requires.

Piercy (1987) suggested some characteristics of MKIS that integrate to form MKIS concept such as: MKIS stores and integrates information on marketing issues from many resources, MKIS provides the dissemination of such information to users, MKIS supports marketing management decision making in

both planning and control, MKIS is likely to be computerised, and MKIS is not simply a new name for market research. In the light of the above mentioned characteristics, MKIS is an integrated system which undertakes many tasks. The definition also pointed out that there is a difference between MKIS and market research.

Moreover, Marshall and LaMotte (1992) defined MKIS as a formal system designed with objective of creating organised, regular, and relevant information for the required analysis by marketing decision makers. This definition reveals key attributes of MKIS: first, MKIS is not limited to computer hardware or software, second, MKIS depends on organised and regular flows of relevant information, third, the information of MKIS must be relevant to decision making, finally, marketing decision makers are expected to carry out further analysis of the MKIS information (O'Connor and Galvin, 1997).

Ashill and Jobber (2001) also concluded that an MKIS is defined as a system in which information on any aspect of marketing is formally gathered, stored, and distributed to decision makers in accordance with their information needs on a regular planned basis. Kotler and Armstrong (2001) suggested that a marketing information system (MKIS) consists of people, equipment and procedures to gather, sort, analyse, evaluate, and distribute accurate information in a timely manner that is useful for marketing decision makers.

Consequently, for the purpose of this study, MKIS can be defined as all computerised and non-computerised elements that are designed to gather, analyse, and distribute internal and external (environmental) information concerned with marketing to the right user in order to support strategy and decision makers.

The role of MKIS in banking industry

The banking industry has been undergoing a tremendous change in the past few years. There are many changes in a number and variety of products offered because of the branching or mergers and acquisitions of banks. The intensity of competition and information technology growth within a harsh environment has led to restructuring of retail banking industries. Recent advances in information systems technologies offer new ways of managing banks relationships within international banking environment. Unfortunately, most banks are uncertain how to adapt with these developments effectively. There are many study investigated information technology aspect in banking industry. However, few studies focused on MKIS status and contribution in banking industry.

Mitchell and Sparks (1988) investigated the use of MKIS in the major UK banks. This study concluded that the increasing of introduction of new technology into banks and bank marketing will speed up the process of MKIS adoption.

Baets (1996) provided some empirical evidences on IS strategy alignment in North-American and European banking industry. According to the study, IS alignment is a process including four parts; business strategy, business organisation, IS infrastructure and process, and IT strategy. The study indicated that there is no strong or explicit belief that IT can solve some specific banking problems. However, IS/IT issues are perceived important

Moreover, Nelson (1999) investigated historical analysis of the integration between marketing and information technology within banking industry in USA from 1970 to 1995. The study presented the analysis of banking industry literature over the mentioned time. The main findings from historical analysis indicated that there is lack of integration between the marketing and information services functions within the banking industry.

Colgate (1998) investigated the interface between marketing information systems technology (MIST) and sustainable competitive advantage (SCA) in the retail banking industries in the UK and Ireland. The results indicated that MIST as a way to create SCA has not been fully exploited within the retail banking industry in the UK and Ireland to date. The results also showed that marketing sophistication, organisational size, and previous implementation experience were all critical factors in a successful implementation process of MIST.

Xu (1999) examined the practice and application of marketing information systems (MKIS) in supporting the marketing strategic functions within computer and financial industries in UK. The study concluded that the strategic role of MKIS should emphasis external environmental scanning, processing and strategic analysis in order to enhance marketing managers as well as organisation strategic sensibility and capability.

Colgate (2000) also examined the current level of MKIS sophistication and use of marketing within retail banking industry in Australasia and Europe. The study concluded that although the use of marketing in these countries would seem to be growing, the application of information technology to support marketing is still at relatively low levels of sophistication. According to the study, this may be due to the fact that IT support marketing within the banking industry is very difficult to implement.

In the Arabic region, there are very few studies investigated information technology in banking industry. However, most previous studies focused on how to adopt information technology in banking industry such as Crew (1983) investigated the growth of computer use in Middle East banking industries such as Saudi, Bahrain, and United Arab Emirates. Twati and Gammack (2006) also explored the effect of organisational culture innovation on adoption of IS/IT in Libyan banking industry. They concluded that the Libyan banking industry is not ready to accept and adopt information systems effectively because of lack of infrastructure, lack of top management support, lack of the staff skills, and avoiding anything which is new and uncertain. Moreover, Mahdi and Dawson (2007) identified how the process of technology change and adoption is shaped by a combination of political and social contexts in Sudanese banking industry. They concluded that internet and information technology in Sudanese banking industry is still at early stage. This refers to inadequacy of IT training for banking staff, high staff turn over, and resistance from older employees to IT change initiative. Al- Hajri and Tatnall (2008) investigated the technology and internet adoption by Omani banks compared with Australian banks. They concluded that despite of cultural differences, there are many similarities in attitude toward technology adoption in both countries.

Particularly in Jordan, banking industry is one of the largest investors in the fields of information systems (IS). However, there is a trend among managers of Jordanian banks that the information systems investments and applications are not yielding the anticipated outcomes yet (Mashhour and Zaatreh, 2008).

Al-Sukkar (2005) investigated the application of information systems in Jordanian banking industry and he focused on acceptance of internet and E-commerce in Jordanian banks. Mashhour and Zaatreh (2008) investigated the investment of information systems within Jordan banks. They concluded that information systems have a positive impact on Jordan banks operations. Thus, they evaluated the contribution of IS in the effectiveness of Jordanian banks operations from customers perspectives.

Methodological considerations

The general objective of case study is to develop understanding of that case in its natural setting and recognise its complexity and its context. Moreover, the case may be an individual, organisation, community ...etc (Punch, 2005). Sarantakos (2005) proposed basic criteria for case study; such as, the case study should be conducted in natural setting and it is suitable for depth analysis. Additionally, the case study perceives respondents as experts not as sources of data. Accordingly, the aim of case study is to provide deeper understanding of MKIS status in Jordanian banks.

Moreover, many procedures are employed in case study design such as Jordanian banking industry sector will be considered as one case due to the aim of the study that the role of MKIS in Jordanian banking industry as a sector. Moreover, the study uses semi-structured interview as appropriate style for many reasons; the interviewer has a set of questions as the interview schedule. However, the questions are able to vary in accordance with interviewee responses. Moreover, further questions may be asked in certain cases.

Many procedures are considered by the researcher to ensure the qualitative data validity and reliability such as purposive selection of participants (interviewees) due to the researcher past experience in

Jordanian banking industry. Moreover, each interviewee checks his/her interview transcripts to confirm the contents. In addition, the researcher informs interviewees that they have right to amend, change or cancel any response. Furthermore, consistency test among each interviewee responses to ensure that there is no conflict in his/her responses.

Unit of analysis

Unit of analysis is an individual who involves with marketing information systems in Jordanian banking industry. More specifically, they are executives in their banks headquarters. However, purposive selection of interviewees will be employed in the light of the researcher past experience and relationship networks in Jordanian banking industry.

Interviewees' characteristics can be summarised according to four major characteristics. Table 1 shows these characteristics for the seven interviewees.

Table 1: The major characteristics of interviewees

Interviewee No	Gender	Position	Experience years	Educational level
Interviewee 1	Male	Head of MIS	30	Graduate degree
Interviewee 2	Female	Marketing executives	10	Graduate degree
Interviewee 3	Male	MIS manager assistant, network administrator	8	Bachelors degree
Interviewee 4	Male	Marketing manager	20	Graduate degree
Interviewee 5	Male	Marketing manager	10	Bachelors degree
Interviewee 6	Female	Marketing manager	14	Graduate degree
Interviewee 7	Male	Marketing manager assistant	8	Graduate degree

Analytical methods

In the current study, the qualitative analysis will be divided into two sequential stages; initially, each interview will be analysed independently. The major issues in each interview will be highlighted. In the second step, the researcher will employ cross interviews analysis to extract the similarities and varieties among these interviews. Consequently, the researcher will present major themes of these interviews as accumulative and holistic analysis of case study.

1. Textual analysis of interviews

Analysis of Interview 1

The Interviewee defines MKIS as all information about bank competitors, customers, bank products, and market. Mainly, these categories of information are collected by market survey and published information such as internet information.

The interviewee is not fully satisfied with MKIS performance in his bank, dissatisfaction refers to many reasons: first, MKIS is not fully automated in the bank, which means they still depend on manual documents and records, second, lack of coordination among the bank departments, third, access to MKIS is restricted to certain users. The interviewee said:

"My satisfaction level about MKIS performance is almost 75%. We need more coordination between bank departments; Information flow among bank departments is not flexible"

There are many tasks of MKIS such as providing information for different managerial levels about customers, competitors and so on. Moreover, MKIS information helps the bank to develop new products to satisfy customers' needs. Furthermore, it helps the bank to design promotional campaigns. The most important information provided by MKIS is products and customer information. The competitors and market information are less important than customer information. However, the bank uses market information in its promotional campaigns. The interviewee stated that:

"MKIS provides us information about some products and customers like saving accounts; credit facilitates decisions especially, car loans and housing loans"

Analysis of interview 2

The interviewee defines MKIS as all information collected about bank products and services, and all information about central bank and its regulations. MKIS information is collected by two ways; market survey and the published information such as market reports.

The interviewee is not completely satisfied with MKIS performance in her bank. This dissatisfaction mainly refers to overlap of multiple sources of information that lead to user confusion with information repetition. Moreover, lack of confidence in information sources. The interviewee reported that:

"In our case, this leads to information duplication and too much information that is not useful for user. Many sources for the same information create information overlap and confuse the user. Moreover, some information is not accurate"

However, MKIS support decision making in the bank. Moreover, it provides the bank with some important information about customers needs and banking services demand. Furthermore, it provides bank with information about market and industry trends. The interviewee stated that:

"MKIS provides us with different forms of saving accounts; credit facilitates decisions based on customer information. Business loan decision is very risky especially with large amount, so, MKIS gives us trends for our customer industry"

Customer information is the most important information provided by MKIS, subsequently, competitors and central bank information. Furthermore, MKIS support the bank strategy through providing the strategy maker with regular reports about customer and market trends.

Analysis of interview 3

The interviewee defines MKIS in technical term as all databases that include marketing information files such as bank products and customers, competitor information, and central bank regulations.

The interviewee is satisfied with technical performance of MKIS in his bank. The interviewee said:

"About the technical performance of the system, I am almost satisfied"

The major task of MKIS is to provide the business users with the appropriate information about customers. Moreover, it provides information that helps the bank to evaluate marketing performance of employees and marketing performance of the bank branches. In addition, regular reports that support the top management to identify the competitive position of the banks. MKIS also provides information to develop marketing activities according to the bank needs. The interviewee mentioned that:

"MKIS provides the management with information to evaluate the individuals marketing performance and branches marketing performance. Moreover, it provides regular report about our marketing position. Especially, what we need to develop in the marketing tasks"

Moreover, MKIS supports the bank strategy by providing the appropriate information for business users to get the optimal practices in banking. MKIS also provides information to different managerial

levels For example; MKIS provides the bank management with complete information about bank customers like customer gender, income level, and their banking needs. The interviewee said:

“MKIS makes the data flow easier to support decision making processes. Moreover, MKIS consolidate the required information for top management level in the first step, and the other management levels”

Analysis of interview 4

The interviewee defines MKIS as all databases about marketing information in the bank such as all information about existing and potential customers of the bank which is called client databases. Moreover, MKIS includes also information about existing bank products and potential new products, whether this information is computerised or manual. The bank gathers this information based on many tools such as market research or marketing intelligence. Moreover, customer feed back survey is one of the important sources of MKIS information. The interviewee said:

“MKIS includes other issues like market intelligence, clients’ feedback or satisfaction all this information categorised to different categories whether this information is computerised or manual”

The interviewee is not satisfied with the current performance of MKIS in his bank. This dissatisfaction refers mainly to absence and lack of full automation of MKIS. The interviewee said:

“For the current situation of MKIS, I am not completely satisfied. when we have special software for categorising information that will be easier for us. We do some MKIS tasks in manual basis and this is not easy task”

In term of major tasks and functions of MKIS in the bank, there are many tasks of MKIS can be listed, first, it provides the bank with required information about the banking system; second, low human errors; third, saving time and money concerned with information needs. Finally, MKIS helps the bank solve most problems associated with marketing information gathering. The interviewee stated that:

“We can avoid the human errors. The MKIS give us quicker and easier information, we can save the time to gather the required information; we can save money or cost of manual gathering, and we can avoid all headache associated with information gathering”

The customer information is the most important information can be provided by MKIS in the bank. Moreover, bank products information is the second importance. The interviewee mentioned that:

“After I understand my customers then we can launch product based on customer needs and market segments. That’s why the customer information is the most important”

The MKIS affect the bank strategy by providing the appropriate information particularly in market segmentation and product development strategy. The interviewee said:

“Product development strategy is affected positively with MKIS information”

Analysis of interview 5

The interviewee defines MKIS as all marketing information that concerns with competitors, customers, and bank products which are gathered and provided for purposes of improving bank performance. This information can be collected by customers’ visits, customers’ calls, and published banking magazines. The interviewee is not satisfied with the current performance of MKIS in his bank. This dissatisfaction refers to lack of top management support to the MKIS. The interviewee said:

“For performance of MKIS, I think it is not an ideal case and it should be developed. the upper management should believe and support MKIS development. The upper management should provide all facilities to develop effective marketing information systems”

Regarding the tasks and benefit of MKIS, it provides the bank management with competitors’ information, customers’ information like customer needs and customers satisfaction levels. In the light

of this information, the bank can identify its competitive position and develop its products and services. The interviewee said:

"MKIS provides us information about competitors and customers that help us to identify where we are now. Then, we can develop our products. Also, MKIS help us to assess customer needs and customer feedback and their satisfaction levels"

The competitors information is the most important information can be provided by MKIS in the bank. In addition, customers' information is considered as the second importance.

Analysis of interview 6

The interviewee defines MKIS as all information that is collected about bank competitors, customers, bank products and services, and the bank environment. These categories of information are collected by marketing staff through market surveys.

The interviewee is not satisfied with the current performance of MKIS in her bank. This dissatisfaction refers to non-accurate information sources. In addition, high cost of information sources. The interviewee stated that:

"I am not satisfied about MKIS output in the bank and it should be developed to be more beneficial. MKIS information is not completely accurate and the sources of information sometimes are not credible. Moreover, to collect information for MKIS, the information cost us too much"

However, there are many tasks for MKIS in the bank; MKIS provides the bank with required information in quick and easy way. More specifically, MKIS provides the bank with appropriate information to build strategy about competitors, customers, and market. Moreover, MKIS provides the bank with information required to measure the success of product development or new products. The interviewee said:

"MKIS is easy way to provide the bank management with required information about customer, competitors, and banking market"

Analysis of interview 7

The interviewee defines MKIS as all integrated marketing information that concerns different marketing units such as marketing research, market segmentation, product development, promotion, and electronic marketing.

The interviewee is not satisfied with the current performance of MKIS in his bank due to absence of full automation of MKIS tasks. The interviewee stated that:

"The marketing information system is not fully automated. So, we still use manual element to collect and analysis marketing information"

Regarding the tasks of MKIS, MKIS makes collection and analysis of marketing information easier and quicker. Moreover, MKIS help the bank to distribute the information to different users in bank departments. Customer information is the most important information provided by MKIS in the bank, market information as market share information lie in the second importance. MKIS affect the bank strategy by creating awareness for strategy makers. The interviewee said:

"MKIS make information available in an easy way for the users. The process of information collection and analysis will be simple. Moreover, MKIS helps the bank to distribute information for many departments in the bank. MKIS also creates awareness for strategy maker, MKIS information leads to integration in the bank strategy"

2. Cross interviews analysis

In the light of holistic view of all seven interviews, the researcher can extract some common similarities, varieties, and themes in the selected case

Definition of MKIS

All interviewees were asked to define MKIS term from their perspectives. Their definitions are shown in Table 2.

Table 2: Interviewees definitions of MKIS

Interview No	MKIS definition
Interview 1	MKIS is all information about bank competitors, customers, bank products, and market. Mainly, these categories of information are collected by market survey and published information such as internet information.
Interview 2	MKIS is all information collected about bank products and services, and all information about central bank and its regulations. This information collected by two ways; market survey and the published information such as market reports.
Interview 3	MKIS as technical term is all databases that include marketing information files such as bank products and customers, competitor information, and central bank regulations.
Interview 4	MKIS is all databases about marketing information in the bank such as all information about existing and potential customers (client database). Moreover, all information about existing bank products and potential new products, whether this information is computerised or manual information. The bank gathers this information based on many tools such as market research, marketing intelligence, customer feed back survey.
Interview 5	MKIS is all marketing information that concerns with competitors, customers, and bank products that are gathered and provided for purposes of improving bank performance. This information can be collected by customers' visits, customers' calls, and published banking magazines.
Interview 6	MKIS is all information that is collected about bank competitors, customers, bank products and services, and the bank environment. These categories of information are collected by marketing staff through market surveys.
Interview 7	MKIS is all integrated marketing information that concerns with different marketing units such as marketing research, market segmentation, product development, promotion, and electronic marketing.

As noticed from (Table 2). MKIS is defined by interviewees with different perspectives. However, all interviewees stated that MKIS includes all computerised and non-computerised marketing information collected in various ways about different marketing issues such as bank customers, products, competitors, central bank regulations, and bank market. Moreover, published information, market research and survey reports are the most important sources of these information categories.

Satisfaction about MKIS performance

Almost, all interviewees are not satisfied about the current status of MKIS in their banks except one interviewee is satisfied in (interviewee 3). Moreover, the interviewees justified their dissatisfaction with different reasons; these different reasons can be summarised in Table 3.

Table 3: Reasons for interviewee dissatisfaction in different Jordanian banks

Dissatisfaction reason	Inter. 1	Inter. 2	Inter. 3	Inter. 4	Inter. 5	Inter. 6	Inter. 7
Absence of MKIS automation and particular software.	✓			✓			✓

Access to MKIS is restricted to certain users.	✓						
Overlap among multiple sources of information that lead to user confusing with information repetition.		✓					
Non-accurate sources of MKIS information.		✓				✓	
Lack of coordination among the bank departments.	✓						
Lack of top management support.					✓		
High cost of information sources.						✓	

As noticed from (Table 3), there are different reasons for interviewees' dissatisfaction about the current status of MKIS in their banks. However, the most important reasons are absence of MKIS automation and non-accurate sources of MKIS information.

MKIS tasks (functions)

The interviewees have different views for the task of MKIS in their banks. Therefore, the major tasks of MKIS can be presented in Table 4.

Table 4: MKIS tasks in different Jordanian banks

MKIS tasks	Inter. 1	Inter. 2	Inter. 3	Inter. 4	Inter. 5	Inter. 6	Inter. 7
MKIS provides information for different managerial levels about customer, competitors and so on.	✓	✓					
MKIS information helps the bank to develop new products to satisfy customers' needs. Moreover, it provides information to measure the success level of new products	✓		✓			✓	
MKIS helps the bank to design promotional campaigns.	✓						
MKIS provides important information about customers' needs, competitors, and banking services demand. Furthermore, it provides bank with information about market and industry trends and the banking systems		✓		✓	✓		
MKIS provides information that helps the bank to evaluate marketing performance of employees and marketing performance of the bank branches			✓				
MKIS provides regular reports that support the top management to identify			✓		✓		

the competitive position of the banks.							
MKIS leads to low human errors save time and money of information needs. It consider easy and quick way to provide the information needs				✓		✓	✓
MKIS helps the bank solve most problems associated with marketing information gathering				✓			
MKIS provides the bank with appropriate information to build strategy about competitors, customers, and market.						✓	
MKIS help the bank to distribute the information to different users in bank departments.							✓

As noticed from (Table 4), the major task (function) of MKIS is to provide the appropriate information to banks about customer, product, competitors, and market in easy and quick way with low human error.

Information categories of MKIS

The interviewees have different perspectives for the most important information provided by MKIS. They specifically were asked to provide a certain order for the most important information provided by MKIS. Table 5 shows these perspectives

Table 5: the most important information provided by MKIS

Interview No	Order of the most important information
Interview 1	Products , customers, competitors, and market information
Interview 2	Customer, competitors, and central bank regulations information
Interview 3	Customer, competitors information
Interview 4	Customers, products information
Interview 5	Competitors , customers information
Interview 6	Products, customer information
Interview 7	Customer, market information

As noticed from (Table 5), customer information is the most important information can be provided by MKIS and products information is the second importance.

The study conclusion and strategic implications

In the light of textual analysis of interview transcripts and holistic analysis of the interviews cross analysis, the qualitative study reveals many important insights.

First of all, MKIS can be defined as all marketing information collected about different marketing issues such as bank customers, products, competitors, central bank regulations, and bank market. Therefore, MKIS can be defined as all computerised and non-computerised elements that are designed to gather, analyse, and distribute internal and external (environmental) information concerned with marketing to the right user in order to support strategy and decision makers.

Most MKIS users are not satisfied about MKIS performance in their banks up to date because of different reasons. However, the most important reasons are absence or lack of MKIS automation in Jordanian banks. Moreover, sources of MKIS information are not completely accurate or credible.

Although MKIS is not employed effectively in banks, MKIS in Jordanian banks plays basic roles with different tasks in information gathering and providing for its users. For example, MKIS provides the appropriate information to banks about customer, product, competitors, and market in easy and quick way with low human error.

Furthermore, as mentioned before MKIS provides banks with different categories of information. However, bank products information, customer information and competitors' information are the most important information that can be presented by MKIS in Jordanian banking industry.

Therefore, the study concluded that banks managers have low satisfaction levels about the current status of MKIS in Jordanian banks. The dissatisfaction refers to lack of system automation, poor coordination among banks departments, and lack of top management support for MKIS activities. However, MKIS plays some important roles though its different tasks such as providing the appropriate information about banks products, customers, and competitors.

Accordingly, top managements should support and believe in MKIS capabilities for developing banks performance. Moreover, effective training programs are needed for MKIS users to take advantage of MKIS output. Moreover, matching between MKIS output and its beneficiaries should be considered as primary issues. Furthermore, more coordination is needed among MKIS developers and analysts, marketing departments, and other department in banks as a foundation and feedback for future development of MKIS.

Recommendation for further research

In the light of the study limitation and delimitations, the future studies can investigate the potential development of MKIS effectiveness to create more interaction between MKIS output and users needs. Moreover, MKIS elements and components should be analysed to develop the system in creative and efficient way. The future studies can extend their participants to banking branches employees to adopt bottom-up perspectives in the system development. Methodologically, the future studies can employ different techniques for data analysis such as triangulation method to get complementary insights of study findings.

References and bibliography list

- Al-Hajri, S. and Tatnall, A. (2008), Technological innovation and the adoption of internet banking in Oman. *The Electronic Journal for Virtual Organizations and Networks*, Vol. **10** [online journal], available at http://www.ejov.org/projects/264/Issues/eJOV%20Special%20Issue%20on%20Living%20Labs%2008/eJOV10_SPILL5_Tatnall_Al_Hajri_Technology%20Innovation_2.pdf. (10 July 2009)
- Al-Sukker, A. (2005), The application of information systems in the Jordanian banking sector: a study of the acceptance of the internet. Unpublished PhD thesis, Australia: University of Wollongong.
- Ashill, N. and Jobber, D. (2001), "Defining the information needs for senior marketing executives: an exploratory study", *Qualitative Market Research: An International Journal*, Vol. **4**, No. 1, PP52-61.
- Baets, W. 1996. Some empirical evidence on IS strategy alignment in banking. *Information & Management*, Vol. **30**, No. 4, PP. 155-177.
- Brien, R. H. and Stafford, J. E. (1968), Marketing information systems: A new dimension for marketing research. *Journal of Marketing*, Vol. **32** (July), PP. 19-23.
- Buzzel, R., Cox, D. and Brown, R. (1969), *Market research and information systems*. New York: McGraw-Hill.
- Central Bank of Jordan. (2007), *Directory of Banks*, Amman: Jordan.
- Colgate, M. (2000), "Marketing and marketing information system sophistication in retail banking", *The Service Industries Journal*, Vol. **20**, No. 1, PP. 139- 152.
- Colgate, M. (1998), "Creating sustainable competitive advantage through marketing information system technology: a triangulation methodology within the banking industry", *International Journal of Bank Marketing*, Vol. **16**, No. 2, PP. 80- 89.
- Cox, D. and Good, R. (1967), How to build a marketing information system. *Harvard Business Review*, Vol. **45**, No. 3, PP. 145-154.
- Crew, B. 1983. Banking in Middle East: the computer unveiled. *Industrial Management & Data Systems*, Vol. **83**, No. (11/12), PP.15-18.
- Jobber, D. and Rainbow, C. (1977), "A study of the implementation of marketing systems in British industry", *Journal of the Market Research Society*, Vol. **19**, No. 2, PP. 104-111.
- Fletcher, K. and Wright, G. (1996), "The strategic context for information systems use: an empirical study of the financial services industry", *International Journal of Information Management*, Vol. **16**, No. 2, PP. 119-131.
- Frishammar, J. (2003), "Information use in strategic decision making", *Management Decision*, Vol. **41**, No. 4, PP. 318-326.

- Kotler, P. (1997), *Marketing Management*, 7th edn. New Jersey: Prentice Hall Inc.
- Kotler, P. and Armstrong, G. (2001), *Principles of Marketing*. 9th edn. New Jersey: Prentice Hall Inc.
- Leverick, F., Littler, D., Wilson, D. and BRUCE, M. (1997), "The role of IT in the reshaping of marketing", *Journal of Marketing Practice*, Vol. **3**, No. 2, PP. 87- 106
- Li, E. (1995), "Marketing information systems in the top U.S. companies: a longitudinal analysis", *Information and Management*, Vol. **28**, No.1, PP. 13- 31.
- Li, Sh., Kinman, R. , Duan, Y., and Edwards, J. (2000), "Computer-based support for marketing strategy development", *European Journal of Marketing*, Vol. **34**, No. (5/6), PP. 551- 575.
- Mahdi, M. and Dawson, P. (2007), The introduction of information technology in the commercial banking sector of developing countries: voices from Sudan. *Information Technology and People*, Vol. **20**, No. 2, PP. 184-204.
- Marshall, K. P. and Lamotte, S. W. (1992), Marketing Information Systems: A marriage of system analysis and marketing management. *Journal of Applied Business Research*, Vol. 8, No. 3, PP. 61-73.
- Mashhour, A. and Zaatreh, Z. (2008), A formwork for evaluating the effectiveness of information systems at Jordan banks: an empirical study. *Journal of Internet Banking and Commerce*, Vol. **13**, No. 1, Available online at <http://www.arraydev.com/commerce/jibc/2008-04/Mashhour%20and%20Zaatreh.pdf>. (2 July 2009)
- Mitchell, J. and Sparks, L. (1988), Marketing Information Systems in the Major UK Banks. *International Journal of Bank Marketing*, Vol. **6**, No. 5, PP.14-28.
- Nelson, M. (1999), "Bank marketing and information technology: a historical analysis of the post-1970 period", *International Journal of Bank Marketing*, Vol. **17**, No. 6, PP. 265-273.
- Piercy, N. (1987), "Developing Marketing Information Systems", In: Baker, Michael J., ed., *The Marketing Book*. London: Heinemann Ltd., PP. 204-221.
- Punch, K. (2005), *Introduction to Social Research: Quantitative and Qualitative Approaches*. 2nd edn. London: Sage Publications.
- O'Brien, T., Schoenbachler, D. and Gorden, G. (1995), "Marketing information systems for consumer products companies: a management overview", *Journal of Consumer Marketing*, Vol. **12**, No. 5, PP.16- 36.
- O'Connor, J. and Galvin, E. (1997), *Marketing and Information Technology*, London: Pitman Publishing.
- Sarantakos, S. (2005). *Social Research*. 3rd edn. Hampshire: PALGRAVE MACMILLAN.
- Sisodia, R. (1992), "Marketing information and decision making support systems for services", *Journal of Services Marketing*, Vol. **7**, No. 6. PP. 51-64.
- Smith, S., Brien, R. and Stafford, J. (1968), Marketing information systems: an introductory overview. In: Smith, S., Brien, R. and , Stafford J. *readings in marketing information systems*. Boston: Houghton Mifflin.
- Stake, R. (1995), *The art of case study research*. Thousand Oaks: Sage Publication, Inc.
- Talvinen, J. (1995), "Information systems in marketing: identify opportunities for new applications", *European Journal of Marketing*, Vol. **29**, No. 1, PP 8- 26.
- Twati, J. and Gammack , J. (2006), The impact of organisational culture innovation on the adoption of IS/IT: The case of Libya. *Journal of Enterprise Information Management*, Vol. **19**, No. 2, PP. 151-191.

Uhl, K. (1974). Marketing information systems. In: Ferber, R. *Handbook of marketing research*. New York: McGraw-Hill.

Xu, X. (1999), "The Strategic Orientation of Marketing Information Systems- An Empirical Study", *Marketing Intelligence and Planning*, Vol. 17, No.6, PP. 262- 271.

Yin, Rk. (2003), Case study research: Design and methods. 3rd edn. Thousand Oaks: Sage Publication, Inc. at available online at <http://www.uk.sagepub.com/booksProdDesc.nav?prodId=Book22573>. (22 July, 2009)

Ghazi A. Al-Weshah
University of Wales, Newport - Newport Business School
E-mail: weshah120@yahoo.com
Contact No: +44 (0) 7853134270

Ghazi A. Al-Weshah is a final stage-PhD student in marketing at the Newport Business School, South Wales, UK. He has MBA/marketing since 2002. He had worked as an instructor in business and marketing for 4 year Jordan and Saudi Arabia. Prior to academe he was working as a financial controller in banking industry

Jonathan H. Deacon
University of Wales, Newport - Newport Business School
E-mail: jonathan.deacon@newport.ac.uk
Contact No: +44 (0) 1633 43 23 22

Dr. Jonathan H Deacon is a Reader in Marketing and Entrepreneurship at the Newport Business School, he is a visiting academic at institutions in Spain, Germany and the USA and is Chair of the Chartered Institute of Marketing, Wales – prior to academe he had success in business and broadcasting.

Andrew Thomas
University of Wales, Newport - Newport Business School
E-mail: andrew.thomas@newport.ac.uk
Contact No: +44 (0) 1633 43 24 42

Dr Andrew Thomas is the Associate Dean of Research and Enterprise at the Newport Business School. Following an industrial career in aerospace engineering he entered academia specialising in Business Process Reengineering and Supply Chain Systems going on to publish over one hundred academic papers in this area. He is an Honorary Research Fellow at Cardiff University and a Chartered Engineer with the Institution of Mechanical Engineers.