

Investigating the Relationship between Customer Knowledge Management and Customer Agility: The Mediating Effect of Marketing Capabilities in Five-Star Hotels in Amman

اختبار العلاقة بين إدارة معرفة الزبون والإستجابة الرشيقة للزبون: الأثر الوسيط لقدرات التسويق بفنادق الخمس نجوم في عمان

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Authorization

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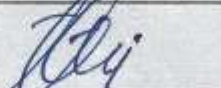
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Thesis Committee Decision

This thesis has been discussed under its title “Investigating the Relationship between Customer Knowledge Management and Customer Agility: The Mediating Effect of Marketing Capabilities in Five-Star Hotels in Amman.” and has been approved on 8/8/2016.

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I would extend my deepest gratitude to my supervisor P

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I greatly value their friendship.

DEDICATION

Words are short to express my deep sense of gratitude towards my whole family. I would extremely like to express my heart-felt gratitude to them for their unconditional love, concern, support, encouragement and inspiration.

I dedicate this work to my beloved Mother and Father. To my sweet brothers.

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ABSTRACT

The purpose of this study is to investigate the relationship between customer knowledge management and customer agility: the mediating effect of marketing capabilities in five-star hotels in Amman, the study seeks to provide the importance of customer knowledge management, marketing capabilities and customer agility to the five-star hotels in Amman, helping to fill in gap that exists in the customer agility literature. In order to achieve the objectives of this study, the researcher designed a questionnaire consisting of (50) statements to gather the primary data from the study sample which consists of all managers working in five –star hotels in Amman. (165) questionnaires were distributed to 15 five star hotels in Amman , but (140) answered questionnaires were retrieved , of which (8) were in valid ,therefore,(132) answered questionnaires were valid for the study. The data collected from the responses of the study questionnaire were used through statistical package for social science (SPSS ver.21) and Amos ver.21 for analysis.

The study results show Customer Knowledge Management has a positive effect on marketing capabilities at level ($\alpha \leq 0.05$) as well as Customer Knowledge Management has

a positive effect on Customer Agility at level ($\alpha \leq 0.05$). The results also show Marketing Capabilities has a positive effect on Customer Agility at level ($\alpha \leq 0.05$). Finally the results show there is a positive indirect significant effect of Marketing Capabilities on the relationship between Customer Knowledge Management and Customer Agility at level ($\alpha \leq 0.05$).

Keywords: Customer knowledge management, marketing capabilities, customer agility.

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بفنادق الخمس نجوم في عمان

إعداد

راية ملحم

إشراف

الأستاذ الدكتور ليث الربيعي

ملخص

هدفت هذه الدراسة لإختيار الأثر الوسيط للقدرات التسويقية في علاقه بين إدارة معرفة الزبون والإستجابة الرشيقة للزبون بفنادق الخمس نجوم في عمان. وتسعى هذه الدراسة إلى تقديم أهمية إدارة معرفة الزبون والقدرات التسويقية والاستجابة الرشيقة للزبون للفنادق الخمس نجوم في عمان وتساعد في تغطية الفجوة الموجودة في مفهوم الاستجابة الرشيقة للزبون. من أجل تحقيق أهداف هذه الدراسة، قامت الباحثة بتصميم إستبانه مكونة من (50) فقرة لجمع البيانات الأولية من عينة الدراسة المكونة من جميع المدراء العاملين في فنادق الخمس نجوم في عمان، وقد تم توزيع (165) إستبانه، إسترجع منهم (140) إستبانه، منها (8) غير صالحة و (132) إستبانه صالحة للدراسة. وتم استخدام برنامج الحزم الإحصائية للعلوم الاجتماعية (SPSS ver.21) و Amos ver.21 للتحليل. وتظهر نتائج الدراسة أن إدارة معرفة الزبون لديها أثر ايجابي كبير على القدرات التسويقية بمستوى معنوية ($\alpha \leq 0.05$) كما أن إدارة معرفة الزبون لديها أثر ايجابي كبير على الاستجابة الرشيقة للزبون بمستوى معنوية

($\alpha \leq 0.05$). وأشارت الدراسة أيضا أن القدرات التسويقية لديها أثر ايجابي على الاستجابة الرشيقة للزبون بمستوى معنوية ($\alpha \leq 0.05$). وأخيرا أظهرت الدراسة أن هناك أثر غير مباشر للقدرات التسويقية على العلاقة بين إدارة معرفة الزبون والاستجابة الرشيقة للزبون كمتغير وسيط بمستوى معنوية ($\alpha \leq 0.05$).

الكلمات المفتاحية: إدارة معرفة الزبون، القدرات التسويقية، الإستجابة الرشيقة للزبون.

Chapter One

Introduction

- (1-0) Introduction.
- (1-1) Study Problem.
- (1-2) Study Objectives.
- (1-3) Study Significance.
- (1-4) Study Question and Hypotheses.
- (1-5) Research Hypothesis.
- (1-6) Study delimitations.
- (1-7) Study Limitations.
- (1-8) Study Operational Definitions.
- (1-9) Study Model

Chapter One

(1-0) Introduction

The need of agility organization comes from the increasing competition and changes in customer demand as well as the ever-increasing new market areas. In today's complex and turbulent environment, the need for agility is untidily recognized. For firms competing in the global market place, agility plays an increasingly vital role in achieving superior performance.

In order to create a competitive advantage, an organization must sense and respond quickly to changes in customer preferences (Day, 1994; Jaychandran et al., 2004). Customer needs are continually growing and changing in competitive environment. Therefore, companies have to sense and respond to these changes much more quickly than competitors in order to create a competitive advantage (Robert and Grover, 2012). Under this condition, manufacturing firms are striving for agility to survive in the time-based competition (Christopher, 2000).

However, according to its original definition, agility means "a continual readiness to change, and sometimes to change radically" (Goldman et al., 1999). It follows that a firm's customer agility according to (Roberts and Grover, 2012) includes the ability to sense and respond quickly to customer-based opportunities for innovation and competitive action for the sake of survival and success.

In addition, Sharifi and Zhang (1999) consider the agility as the capability of any organization to possess the proper insight and sense changes in the working

environment. Such an organization must be able to detect changes in the environment viewing them as positive agents of growth and prosperity (Salavati and Reshadat, 2014). Looking at agility as the flexible coping ability deals with unexpected challenges and unprecedented threats from business environment. Moreover, Maskell, 2001 defines agility as the ability of maintaining prosperity in a continuously changing and unpredictable environment. In fact, agility enhances the organization's capability to provide high-quality products and services and, therefore, it is vitally crucial to increase the organizational competitiveness by enhancing the employees' knowledge and experience which enable the organization to gain the desired results (Hamel and Prahalad, 1994). On this point, Amit and Schoemaker, (1993) advocate the organizational capability to deploy resources generally, using organizational processes to impact and achieve a desired end.

On the other hand, Day (1994) notes that it is impossible to enumerate all possible marketing capabilities because they generally stem from the nature of business environment. However, marketing capabilities are defined as integrative processes designed to put into practice the collective knowledge, skills, and resources of the firm geared to the market-related needs of the business, enabling the business to both add value to its goods and services and meet competitive demands (O'cass and were awarding, 2010). Marketing capabilities are fully developed when the firm's marketing employees frequently utilize their knowledge and expertise (an intangible resource) to solve the firm's marketing problems (Rostami, 2015).

Dove (2001) defines agility as the ability to manage and apply knowledge effectively. Based on the above, agility is promoted by customer knowledge management mainly through improving the innovation responses (Nonaka 1994). Thus, customer knowledge management refers to the degree to which the firm mobilizes and deploys knowledge resources across functional boundaries (Chuang 2004).

The literature has defined a firm's ability to manage product knowledge, customer knowledge, and management knowledge as the basic dimensions of customer knowledge management (Tanriverdi and Venkatraman, 2005).

According to this concept, customer knowledge management is a learning process from which both customer and firms, sharing their experience and knowledge, learn from each other, solve their problems, and take advantage of the exchange process benefits (Plessis, 2007).

Customer knowledge management has been recently regarded as a key source for innovation capabilities and business performance (Rollins and Halinen, 2005).

(1-1) Study Problem

According to the above-mentioned concepts review, in today's dynamic market, market competition is causing both demand and supply to fluctuate more rapidly, widely and frequently than they used to (Lee 2004). Under this condition, an organization ought to be agile, able to sense, and duly respond to market changes quickly and smoothly to maintain competitiveness (Lee 2004). Therefore, to create a competitive advantage, companies need to be more agile. Unfortunately, recent studies paid little attention to the role of marketing capabilities in the relationship between customer knowledge management and customer agility.

Some researchers have highlighted the mediating influence of marketing capabilities on the relationship between customer knowledge management and organization performance (Mohammed et al., 2014). These studies indicate that customer knowledge management has a positive and significant relationship with marketing capabilities (Tasi and Shih 2004), or between customer knowledge management and organizational agility (Salavah And Reshedat 2014), whereas other researchers have investigated firm's customer agility and firm performance (Roberts and Grover, 2012). Based on the above issues, the main problem can be formulated in this research as "What is the relationship between customer knowledge management, marketing capabilities and customer agility, and to what extent does the mediating effect of marketing capabilities specifically affect the relationship between marketing knowledge and customer agility".

(1-2) Study Objectives

The main objective of this study is to investigate the mediating effect of marketing capability on the relationship between customer knowledge management and customer agility by activating the following objectives:

- 1- Determining the effect of customer knowledge management on marketing capabilities in five star-hotels in Amman, Jordan,
- 2- Determining the effect of customer knowledge management on customer agility in five star-hotels in Amman, Jordan,
- 3- Determining the effect of marketing capabilities on customer agility in five-star hotels in Amman, Jordan, and
- 4- Determining the indirect effect of marketing capabilities on customer agility through customer knowledge management as mediator in five star-hotels in Amman, Jordan.

(1- 3) Study Significance

The result of the study may be useful and interesting to all managers working at five- star hotels because it will reveal the effect of marketing capabilities on the relationship between customer knowledge management and customer agility.

This study addresses the importance of customer agility to the five-star hotels and endeavors to fill the obvious gap in literature, and its preliminary step for this is to encourage researchers to undertake further studies which display the

interrelationships between the customer knowledge management, marketing capability and customer agility.

Note that the number of five-star hotels in Jordan (31) hotels, the oldest was built in 1962 and the newest in 2005 according to statistics issued by Jordanian Hotels Association. Also the number of employees at the five-star hotels in Jordan reached 8434 in 2015.

(1- 4) Study Question and Hypotheses

The research problem is represented by the main question: What is the relationship between the customer knowledge management, marketing capabilities, and customer agility?

Based on the main question, the study seeks to answer the following questions:

Question 1: To what extent does the customer knowledge management affect customer agility?

Question 2: To what extent does the customer knowledge management affect marketing capabilities?

Question 3: To what extent does the marketing capability affect customer agility?

Question 4: Is there an indirect effect of marketing capability on customer agility through customer knowledge management as mediator?

(1- 5) Research Hypothesis

Based on previous researches related to the research matter and according to the above research questions, the following hypotheses will be tested:

- H₁:** There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Marketing Capabilities (Pricing, Promotion, Product Development, Distribution Channels, Market Management, Planning and Marketing Research Development) at level ($\alpha \leq 0.05$).
- H₂:** There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).
- H₃:** There is a significant positive effect of Marketing Capabilities (Marketing Research, Pricing & Product development, Distribution Channels and Promotion & Market Management) on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).
- H₄:** There is a significant positive indirect effect of Customer Knowledge Management on Customer Agility (Sensing & Responding through Marketing Capabilities) at level ($\alpha \leq 0.05$) as mediator.

(1- 6) Study Delimitations:

- 1- Human Delimitations: The study targets all managers working at five-star hotels in Amman, Jordan.
- 2- Location Delimitations: The five-star hotels in Amman, Jordan.
- 3- Time Delimitations: The researcher expects to complete this study during 2016.
- 4- Scientific Delimitations: The study will adopt the scales of previous studies as follows:

Customer Knowledge Management will be measured using the scale developed by Garcia-Murillo and Annabi (2002), Gibbert et al. (2002), and Gibbert et al. (2003). This scale is designed to measure three sub-dimensions of customer knowledge management: knowledge from customer, knowledge about customer, and knowledge for customer, using Likert's five-point scale (1= strongly disagree, 5= strongly agree).

Marketing Capabilities will be measured using a scale developed by Vorhies and Harker, 2000) based on the recommendations of Churchill, 1979. This scale is designed to measure six distinct areas : pricing , promotion , product development , distribution channels, marketing management, planning, and marketing research development. To assess the company's marketing capabilities, Likert's five-point scale was used (1=strongly disagree, 5= strongly agree), (Vorhies and Harker 2000).

Customer Agility will be measured using the scale developed by Robert and Grover, 2012 based on Narver et al., 2004, Slater and Narver, 2000, Jayachandarn et al., 2004; Kohli et al., 1993, Jayachandran et al., 2004, and Kohli et al., 1993 to assess the

company's customer agility, using Likert's five-point scale (1=strongly disagree, 5=strongly agree).

(1-7) Study Limitation

- 1- Implementing the study results could be restricted to five-star hotels in Amman only and therefore cannot be generalized the results.
- 2- Information collected from data will depend on the amount of the responses of all managers working at five-star hotels in Amman, Jordan.
- 3- The study sample is divided into several geographical areas in amman city , which make the researcher wok more difficult and needs more time to do .
- 4- The validity of the research result depend on the perception of all managers in a hotel.

(1 – 8) Study Operational Definitions

- 1- Customer Knowledge Management: is a valuable asset to the hotel, enabling it to satisfy customer needs in a timely manner, meanwhile acclimatizing to changing markets.

The purpose of this study will include the following three dimensions: Knowledge from customer, knowledge about customer, knowledge for customer (Garcia-Murillo and Annabi, 2002; Gibbert et al., 2002;Gebert et al., 2003).

Knowledge from customers: is customers' information about products, competitors and markets, which is acquired from customers to understand the external environment (Garcia-Murillo and Annabi, 2002).

Knowledge about customers: includes looking into customers' backgrounds, transaction histories, customer motivations and wants, etc. which help firms to understand customer's needs better (Smith and McKeen, 2005).

Knowledge for customers: includes everything that a firm provides for customers to help them, satisfy their knowledge needs and promote the level of their knowledge (Gebert et al., 2003).

- 2- Marketing Capability: is defined as integrative processes designed to make use of the collective knowledge, skills, and market-related needs of the business to coordinate activities.

The purpose of this study will include the following six dimensions: Marketing research, Product development, Pricing, Distribution channels, Promotion, and Marketing management (Vorhies and Harker, 2000).

Marketing research capability :is the set of processes needed to discover broad-based market information, to develop information about specific customer needs, and to design marketing programs to meet these needs and market conditions (Vorhies and Harker, 2000).

Product development capability: is to design products that can meet customer needs and internal company goals and hurdles, which are able to outperform competitors' products (Vorhies and Harker, 2000).

Pricing capability : is the processes needed to competitively price the firm's products and services and monitor prices in the market (Vorhies and Harker, 2000).

Channels/distribution capability : is to manage the relationships with distributors effectively (Vorhies and Harker, 2000).

Promotion capability :is advertising, sales promotions, and personal selling activities the firm uses to communicate with the market and sell the product (Vorhies and Harker, 2000).

Marketing management capability : is customer acquisition management, the management of marketing programs, and the ability to coordinate action among the diverse elements in the firm needed to implement a marketing program (Vorhies and Harker, 2000).

- 3- Customer Agility: is the degree to which hotels are able to sense and respond quickly to customer-based opportunities for innovation and competitive actions. This definition includes key elements of agility that include capability, sensing and responding, and speed. The term "customer-based" refers to opportunities which originate from: (1) individual customers, (2)

discussions among customers, and (3) interaction between customers and a representative of the firm.

The purpose of this study will include the following two dimensions : customer sensing capability ,and customer responding capability (Roberts and Grover,2012). This item will be mentioned in the questionnaire form.

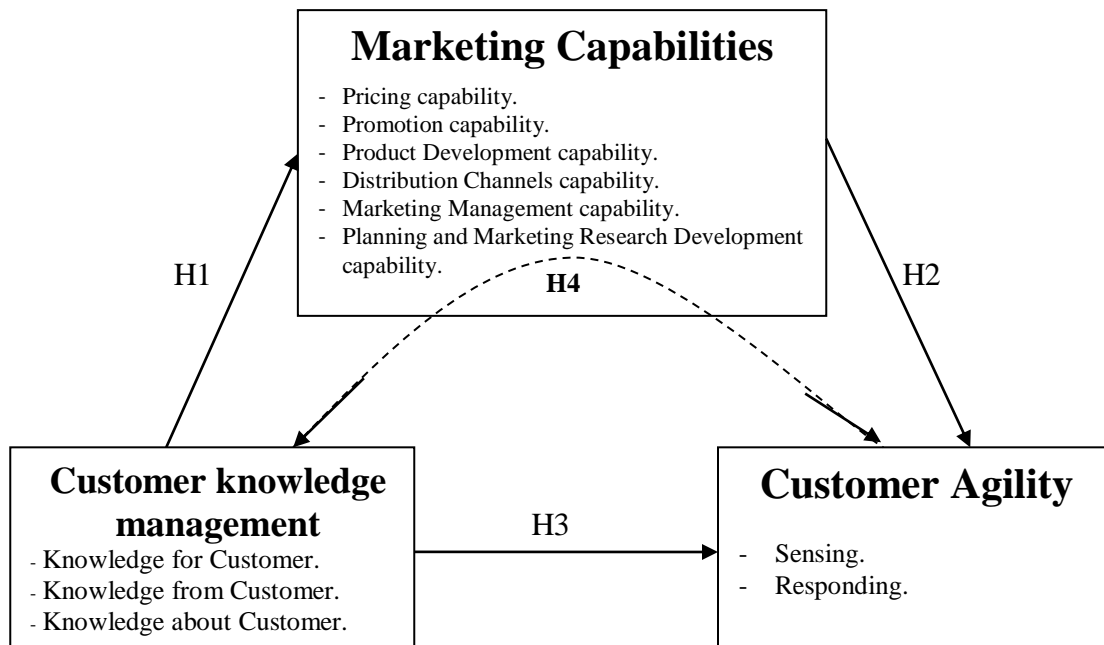
- 4- Five star hotels : a top – quality hotel(A commercial establishment providing lodging , meals, and other guest services) offering exceptional luxury.

(1-9) Study Model

This conceptual model is based on the relationship between marketing knowledge, marketing capabilities, and customer agility and to the extent that the mediating effect of marketing specifically affects capabilities as the mediator variable.

Figure (1.1) – Proposed Research Model

Figure 1 – Proposed Research Model



Source, adapted from:

- (Roberts, Grover, 2012, Narver and Slater, 2004).
- (Vorhies, Harker, 2000, Vorhies, Morgan, 2009)
- (Garcia-Murillo, Annabi, 2002, Gibbert, Geib, Kolbe, 2003)

Chapter Two

Theoretical Review and Previous Studies

- (2-0) Literature Review.
- (2-1) Customer knowledge management
- (2-2) Marketing Capabilities
- (2-3) Customer Agility
- (2-4) Previous Studies

Chapter 2

Theoretical Review and Previous Studies

(2-0) Literature Review

In this section, we will review two important sides:

The first is the theoretical framework, and the second is the previous studies that are related to our study.

Theoretical Review

Customer Knowledge Management

Knowledge Management

The knowledge-based view of the firm suggests that knowledge is the key resource for creating, improving, and maintaining the economic benefits and market growth (Foumani and Chirani, 2012). According to Quintas (2002), Knowledge is the most intangible asset; therefore, business is managed in many ways to use this asset to create the highest value. Organizations that generate new knowledge and apply it effectively and efficiently will be successful at creating economic value (Emadzade, et. al., 2012). According to Drucker (1995), knowledge can be concerned as the most important and dominant resource and maybe the only source of comparative advantage (Drucker, 1995).

Knowledge is defined as derived outcome of framed experiences, values, contextual information, and experts' insight that provide a framework for evaluating and combining new experiences and information (Akram, et. al., 2011). However,

the mere act of processing knowledge itself does not guarantee strategic advantage. Alternatively, knowledge has to be managed (Emadzade, et. al., 2012). Knowledge management is an organizational process that aims to create a centralized knowledge source within the organization that acquires, assimilates, distributes, integrates, shares, retrieves and reuses the internal and external, explicit and tacit to bring innovation to the organization in the form of the product, people, and organizational process (Akram, et. al., 2011). The purposes of knowledge management are the leveraging and development of the organization's knowledge assets to implement better knowledge practices, improved organizational behaviors, better decisions, and enhanced organizational performance. Although individuals certainly can personally perform each of the knowledge management processes, knowledge management largely is an organizational activity that focuses on what managers can do to achieve knowledge management's goals, how they can encourage individuals to participate in achieving them, and how they can create social processes that will facilitate knowledge management success (King, 2009).

Knowledge has been classified into different types, and is mostly viewed as explicit and tacit knowledge, market knowledge and technological knowledge:

1. Explicit knowledge can be expressed in words and numbers and shared in the form of data, scientific formula, specifications and manuals.
2. Tacit knowledge refers to the individual's actions and experience as well as the ideas, values, or emotions (Lorenzon, et. al., 2005).

3. Market knowledge presents information about customer demands, their needs, and their business processes. This type of knowledge is very important because it provides opportunities for creating innovation. Moreover, market knowledge provides information about the problems and requirements of customers and facilitates the estimation of the value of new product/services and of other changes in the market.
4. Technological knowledge refers to knowledge of production methods and tools. It contains the educational level of employees, their work and technological experience, and the adopted technological knowledge which can be obtained through research and development (R&D), engineering, implementation of scientific projects and similar activities (Bojan and Bojan, 2012). King (2009) distinguished three different levels of knowledge: “know what,” “know how”, and “know why”. The first level is “know what” which specifies what action to take when one is presented with a set of stimuli. The next higher level of knowledge is “know how” which refers to know how to decide on an appropriate response to a stimulus. This type of knowledge allows a professional to decide which action is best, even in the presence of significant noise. The highest level of knowledge is “know why” knowledge. At this level, an individual has a deep understanding of causal relationships, interactive effects, and the uncertainty levels associated with observed stimuli or symptoms (King, 2009).

Nowadays, having knowledge and utilizing it in organizations have become a procedure which can lead them to the advantage of competition. Availability of knowledge in organizations is such a valuable fund that empowers them in various complicated situations (Davenport & Marchand, 2001). Knowledge management includes supporting innovations, brainstormed ideas, and utilization of organizational thinking power. It also embodies acquiring appropriate insight and experience to make the data accessible and useful for the time and place where they come in handy, and also for those who need it (Parlby & Taylor, 2000).

Knowledge management is an approach which creates data to meet the managers', customers' and operators' satisfaction. In other words, knowledge management is an inclusive process that considers identification, transmission, and usage of accurate data and experience in organizations. The main principles of knowledge management include implementation and maintenance of the organizational and technical infrastructures as the indispensable groundwork to spread knowledge and to opt for specific technologies. All available sources of information such as personnel, information centers, documents and files are gathered and classified in right categories. All the data will be accessible in many ways everywhere. The appropriate data will be provided for the right stuff and systems at the right time (Davenport & Marchand, 2001).

Knowledge can be divided into two groups: implicit and explicit. Explicit knowledge is subjective, reasonable and logical. In other words, explicit knowledge is a collection of policies, approaches, soft wares, documents,

instructions, reports, and objectives in each organization. Explicit knowledge can be stated as words and numbers, or given in forms of data, scientific formulae, detail descriptions, and instruction manuals. This knowledge can be simply distributed among people both officially and systematically (Nonaka & Takeuchi, 1995).

The other type of knowledge is implicit that is totally personal and can rarely be distributed in specific forms among people. Mental insight, intuition and hunches account for this type of knowledge. Implicit knowledge has deep roots in experimental activities, objectives, values and feelings (Nonaka & Takeuchi, 1995).

Organizations must enjoy both explicit and implicit knowledge in management in order to manage their data. That is why they are after preparing good cycles of available knowledge. Information cycle or so-called knowledge management includes four sections: first, accessible knowledge inside the organization must be identified, collected and stored in a proper place. Next, information should be shared with others to be added to the data and regenerate information. This way, the acquired knowledge can be utilized to attain the aspired objectives (Davenport & Marchand, 2001). The presented introduction about knowledge management can generally be applied to many organizations. However, what is highlighted in this article is knowledge management process in commercial circumstances which is further elaborated below.

Knowledge-based view (KBV) of the firm is derived from the resource-based view (RBV) of the firm. It claims that knowledge is the main source of productive firm (Grant, 1996). The KBV of the firm focuses on knowledge as the most important strategic firm's resource.

It is not surprising that knowledge sharing has gained wide attention from the past strategic management literature. A concept of knowledge sharing, particularly addressed in the strategic management literature, is the realization of competitive advantage through effective sharing of knowledge. Organizational knowledge sharing is a key component of this view because researchers have found that sharing knowledge is the key to organizational productivity (Almeida & Kogut, 1999).

According to Davenport and Prusak (1998), unlike material assets that depreciate in value with the use, knowledge assets appreciate in value with the use of new ideas and shared knowledge stays with the giver while enriching the receiver. Hence, with an effective sharing process, an organization can develop its knowledge base and enhance its competitiveness (Andrews & Deiahaye, 2000).

People are important to knowledge sharing, and the sustenance of a competitive advantage is grounded in the KBV of the firm. When the managers of the organizations manage the knowledge of their company internally, they create tangible goods and intangible structure as a better process and a new design for the product (Grant, 1991). When managed to exploit the knowledge, in delivering goods and services, they also create intangible structure, such as explicit

knowledge, customer relationship, reputation, and new experience for the customers (Grant, 1991).

For an enterprise, knowledge management is like fundamental infrastructure in organization and technology. It is defined as “the continuous process of providing accurate knowledge at appropriate times to employees who need it, with a view to helping them take accurate actions to enhance organizational performance.” In today’s world of rapidly increased information, what enterprises were proud of in the past – technique, intensive labor, and equipment – is no longer offering assurances in keeping advantages on the market. Knowledge management, instead, aims to acutely react to the external environment and proceed accordingly to gather information, make decisions, and take actions; it is also a necessary measure in the flexible management, applied in response to various circumstances, and a comprehensive strategy ensuring constant self-rebuilding within the enterprise.

Knowledge has been widely recognized as a determinant of organizational performance. Business capability and effectiveness require an effective sharing of resources and knowledge. In particular, Knowledge sharing among different companies and departments can improve organizational processes since intangible knowledge plays an important role in achieving competitive advantage. According to (Zahari et al., 2013), business main objective for existence is to gain competitive advantage in the marketplace. Nowadays, the elements of

competitiveness in the organization have gradually shifted from labor and capital emphases to its unique and sustainable resource, which is knowledge. The 21st century will be the century of knowledge, where the ability to control and manage knowledge effectively plays an important role in maintaining the company's competitive advantage and survival. Therefore, Customer Knowledge Management (CKM) is regarded as a competitive asset in creating value for the organization.

(2-1) Customer Knowledge Management

Customer Knowledge Management (CKM) refers to the management of customer knowledge (Rowley, 2002). By understanding the customers' needs and wants, it is important for businesses to streamline processes, products and services in order to build sustainable customer relationships. However, this understanding must be shared among departments because organization consists of interdependent units working together to serve the customers. Sharing the customer knowledge as one type of knowledge sharing can help firms to identify present and latent customer's needs.

Until now, most companies have focused on collecting vast amounts of data about their customers, but they do not know how to deal with them (Davenport, 2001). The concept of CKM has been firstly advocated by Gibbert, Leibold, and Probst (2002) who describe CKM as the strategic process by which cutting-edge companies emancipate their customers from passive recipient of products and services, to empowerment as knowledge partners. They said that CKM is about getting, sharing and expanding customer knowledge that resides in, for both customer and corporate benefits. It can take the form of

prosumerism, joint innovation, with team-based learning, communities of practice and joint intellectual property (IP) management.

In their paper, CKM reflects customer knowledge management; the knowledge that resides in the client, in contrast to the knowledge of the customer, which is the classical knowledge used in Customer Relationship Management (CRM) system. The second to advocate this concept is Gebert, Gelb, Kolbe, and Brenner (2002) from University of St. Gallen, who develop their CKM concept through the reflections on CRM and the use of knowledge gathered to support business processes. The task of CKM, as highlighted by them, is to design the knowledge flow inside and between the CRM processes and to allocate relevant knowledge gained from customer-related processes to others.

Owing to the importance of customers and their increased competencies and abilities, firms should engage customers in their internal process (Teece, 2010) to manage customer knowledge and access to important sources of information and ideas (Rollins and Halinen, 2005). By acquiring, sharing, transferring and utilizing information, knowledge and ideas related to customers, CKM effectively manages knowledge from the customer's perspective and provides important sources for novel ideas. These can be used to develop new products/services and new solutions for satisfying customers' needs and problems (Garcia-Murillo and Annabi, 2002).

CKM supports the exchange of customer knowledge within a firm as well as between customers and firms to learn from, about and with customers. In fact, CKM is a learning process from which both customers and firms share their experience and knowledge, learn from each other, solve their problems and take advantage of the exchange

process benefits (Plessis, 2007). CKM improves the absorptive capacity of a firm, which is defined by Cohen and Levinthal (1990) as a special capability that allows a firm to gain and absorb external knowledge and manage and develop it internally. In fact, CKM recognizes and identifies the value of new external knowledge and invests in customers' competencies to assimilate and utilize them for commercial ends, which are essential for a firm's innovation (Belkahla and Triki, 2011).

To access customer, knowledge takes a lot of effort because it is embedded in the customer's mind as tacit knowledge. Through CKM, customers are encouraged to share their experiences with other customers to solve their problems. Knowledge workers can use these experiences and extract useful information from them; these then become an important source of innovative ideas and competitive advantage. However, exchanging customers' tacit knowledge (including customers' experience, ideas, information, problems, needs and data) to explicit knowledge (including useful ideas for solving customers' problems and helpful ideas for new innovative services or for improving current services) is not as easy as it may seem.

In Figure 1, Rectangle 1 shows the position of customer knowledge, and Rectangle 4 shows the position of firm knowledge. CK does not have a direct connection with FK(Firm's Knowledge). Therefore, knowledge workers must make some fundamental changes to change external and tacit knowledge into internal and explicit knowledge. CK exclusively stands for customer knowledge with customer-oriented processes, which must first merge with firms' processes (Rectangle 2). This then becomes firms' knowledge with

a customer-oriented process (Rectangle 3) and finally converts to the last rectangle and becomes meaningful firm's knowledge with firm's processes.

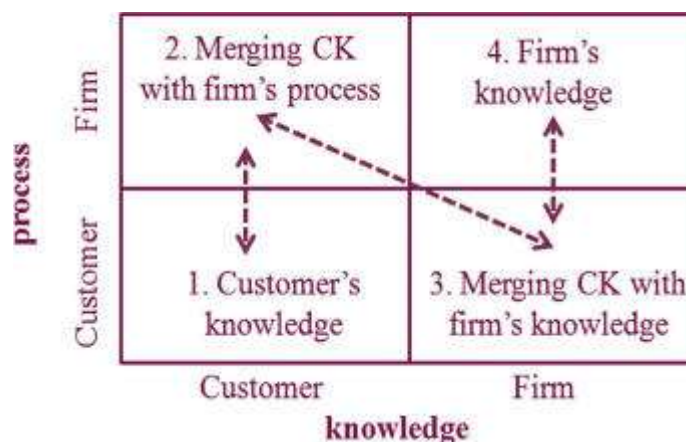


Figure (2.1): [Converting customer's knowledge to firm's knowledge]

The linkage between Rectangles 4 and 3 indicates the complete merger of customer knowledge with firm knowledge. In Rectangle 4, customer knowledge has passed through different levels and has penetrated to a deeper layer of the firm. Therefore, the customers' usual data and information becomes useful, valuable and inimitable knowledge for firms, which cannot only be used to solve customers' problems but also becomes an important source of innovative ideas and competitive advantage.

CKM pays attention to both customer knowledge and firm knowledge and invests in both external and internal competencies, therefore, it enables firms to create new products and services to respond to variable market situations.

Data, information and knowledge, which are gathered by CKM, are important sources for competitive advantage because they are embedded in a firm's process and are difficult for competitors to imitate (Garcia-Murillo and Annabi, 2002).

Customer Knowledge Management is a dynamic process of obtaining and improving valuable information about customers by means of different methods and approaches and also shares the customer knowledge in the organization. Davos defines the Customer Knowledge Management as using knowledge "for", "from", "and "about" customer to increase abilities of customers by organization.

1. Knowledge about Customer: This knowledge is collected in order to understand customer motivations and take steps toward giving service in a personal way and includes customer's history including contacts, need and expectations from a shopping. In addition to rare data and previous transactions, Knowledge about customer also considers the present needs, future demands, contacts, purchasing activities and financial ability of customers. Knowledge about customer is being collected during the process of support and customer relationship management service and analyzed through the process of customer relationship management.

Knowledge about customers has an explicit nature and includes looking into customers' backgrounds, transaction histories, customer motivations and wants, etc. which help firms to understand customer's needs better (Smith and McKeen, 2005).

2. Knowledge from Customer: It's the knowledge from customer that has been acquired from products, suppliers and markets, and organization obtains it in an appropriate way. Acquiring this knowledge demands efficient system of communication between

organization and customer. The acquired knowledge from customer should be used with the purpose of creating and offering services, products, ideas, and products and service development. However, methods of acquiring knowledge from customers are different, and each company should recognize and choose appropriate solutions according to its conditions and capacities.

Knowledge from customers is customers' information about products, competitors and markets, which is acquired from customers to understand the external environment (Garcia-Murillo and Annabi, 2002). This kind of knowledge has a tacit nature and improves innovation capability which leads to new product advantages. However, a greater challenge for firms is to exploit knowledge from customers and turn it into explicit knowledge (Desouza and Awazu, 2005). The use of social media, such as discussion forums, is an important tool used by CKM, which can help firms gaining knowledge from customers. In these forums, diverse people with different levels of knowledge can express their needs, problems and doubts (Maswera et al., 2006), and firms can use this information to make sense of community's perspectives to develop new ideas, improve current products/services and launch new and innovative products/services.

3. Knowledge for Customer: In order to support customers through their purchasing cycle, a continuous flow of knowledge should be directed from organization to the customers (Knowledge for Customer) in a way that increases customer's trust and confidence in organization's products and services. Knowledge for customers includes information

about products, markets and suppliers. This dimension of knowledge will also affect on customer's perception of service quality.

Knowledge for customers includes everything that a firm provides for customers to help them, satisfy their knowledge needs and promote the level of their knowledge. The nature of this knowledge is explicit and affects on the customer's perception of service quality (Gebert et al., 2003).

In general, knowledge from customers creates long-term benefits by developing new ideas and continuously improving products/services. Knowledge about customers creates short-term value by improving effectiveness. Knowledge for customers creates short-term value by improving customers' experience and information as well as increasing a firm's validity (Smith and McKeen, 2005).

(2-2) Marketing Capabilities

Capabilities are effect of complex bundles of knowledge, skills and abilities embedded within firm business processes operating at various levels within firms (Rostami,2015). As such, capabilities are built upon the processes developed by firms by bringing people and resources together in repeated efforts. On this point, Amit and Schoemaker (1993) advocate that capability refers to the organizational capacity to deploy resources, generally in combination, using organizational processes to affect a desired end.

Capabilities are unique combinations of the knowledge-based, tangible or intangible resources of a firm, that indicate what a firm can achieve by having teams of resources working together (Hitt et al.,1997).

Capabilities are complex bundles of skills and knowledge exercised through organizational processes, that enable firms to co-ordinate their activities, use their assets, and continuously learn and improve (Day,1994).

Capabilities are commonly defined as the glue that brings organizational assets together and deploys them advantageously (Zhou et al., 2008). They differ from assets in that they are not observable, are difficult to quantify, and cannot be given a monetary value as can tangible plant and equipment (Day, 1994).

Moreover, capabilities are so deeply embedded in the organizational routines and practices that they cannot be traded or imitated. Thus, they are the most likely source of competitive advantage. Research attention in the marketing literature focuses on market-relating capabilities which facilitate the effective deployment of market-based assets. These capabilities are usually associated with the marketing function and concern individual “marketing mix” elements as well as the processes of marketing strategy development and execution.

Vorhies et al, (2009) classifies marketing capabilities as specialized and architectural. Specialized marketing capabilities reflect task-specific marketing activities (e.g., marketing communications, personal selling, pricing, product development), whereas architectural capabilities provide the planning and coordination mechanism that ensures the effective deployment of these marketing program-level activities. Both types of marketing capabilities as well as their integration are significant drivers of market effectiveness (Vorhies et al., 2009). In addition to this broad classification, other researchers have

examined specific capabilities related to individual marketing processes including market-sensing capabilities, relational capabilities, brand management capabilities and innovation capabilities (Day, 1994; Menguc & Auh, 2010; Morgan, Slotegraaf, & Vorhies, 2009; Smirnova et al., 2011). The findings of these studies reveal a positive effect of marketing capabilities on business performance and confirm the significant contribution of marketing capabilities to effective strategy implementation. Also, continuously learning and improving (Day, 1994) marketing capabilities are developed by learning processes when firm marketers repeatedly apply their knowledge to solve marketing problems.

The capability-based theory suggests that a firm can achieve competitive advantage through distinctive capabilities possessed by the firm and that the firm must constantly re-invest to maintain and expand existing capabilities in order to inhibit imitability.

For a firm to enjoy a sustained competitive advantage, it must be the case that these capabilities cannot be competed away. The resource based view identifies two conditions necessary for a capability to be an enduring source of competitive advantage; imperfect mobility and imperfect imitability. Imperfect mobility refers to the difficulty of trading in certain capabilities. This might be, for instance, because a capability has arisen from the complex interaction of a number of resources, and hence is firm-specific in nature. Imperfect imitability refers to the inability of competing firms to imitate a firm's distinctive capabilities (Dutta, et. al., 1999:550). According to Teece and Pisano (1994), capabilities must be honed to a user need, unique, and difficult to replicate, thus profits will not be competed away (Teece and Pisano, 1994:539).

Grant (1991) pointed that resources and capabilities which are likely to be important determinants of the sustainability of competitive advantage must have four characteristics:

Durability: The rate of which the underlying resources and capabilities depreciate or become obsolete. Firm's capabilities have the potential to be more durable than the resources upon which they are based on because of the firm's ability to maintain capabilities through replacing individual resources (including people) as they wear out or move on.

Transparency: The firm's ability to sustain its competitive advantage over time depends on the speed with which other firms can imitate its strategy. Capability which requires a complex pattern of coordination between large numbers of diverse resources is more difficult to comprehend than capability which rests upon the exploitation of single dominant resource.

Transferability: The primary source of resources and capabilities is markets for these inputs. If firms can acquire the resources required for imitating the competitive advantage of successful rival, then that rival's competitive advantage will be short-lived.

Replicability: Imperfect transferability of resources and capabilities limits the ability of a firm to buy in the means to imitate success. Much less easily replicable are capabilities based upon highly complex organizational routines. Some capabilities seem simple, but proving them is exceptionally difficult to replicate (Grant, 1991:124-127).

Marketing capability of a firm is reflected in its ability to differentiate products and services from competitors and build successful brands and firms with strong brand names,

and can charge premium prices in foreign markets to enhance their profitability (Weerawardena, 2003). To be aware of marketing capabilities, it is necessary to understand the foundation upon which capabilities are built. Marketing capabilities are developed when the firm's marketing employees frequently apply their knowledge and expertise (an intangible resource) to solve the firm's marketing problems. Often, in the way of solving these marketing problems, intangible resources are combined with tangible resources (assets). (Afzal, 2009).

Development of marketing capabilities can be considered as integrative processes by which knowledge-based resources and tangible resource combine to create superior customer value.

Marketing capabilities therefore can be defined as integrative processes designed to apply the collective knowledge, skills and resources of a firm to the market-related needs of its business through enabling the business to add value to customer value creation and be competitive. The resource-based view of the firm (RBV) advocates that desired outcome of firm's managerial effort is the creation and development of sustainable competitive advantage which in turn achieves superior business performance.

According to the RBV, sustainable competitive advantage can be achieved by possessing certain key assets or capabilities (Barney 1991) since marketing processes are frequently firm specific. Unique marketing capabilities are developed as firms which combine their particular knowledge and skills with other intangible and tangible resources available to them (Day 1994). When these marketing capabilities are inimitable and non-

substitutable and moreover cannot be easily transferred between competitors, they provide the basis for sustainable competitive advantage.

Day, 1994 noted that it is impossible to enumerate all possible marketing capabilities because they generally vary among businesses owing to the nature of the competitive markets, past commitments and anticipated future needs. Marketing capabilities are an important source of competitive advantage for firms. Fahy et al., 2000, Song and Parry, 1997 found that marketing capabilities influence competitive advantage. Additionally, Fahy et al., 2000 suggested that marketing capabilities can enhance financial and market performance.

Based on Day (1994), marketing capability is defined as integrative processes designed to apply the collective knowledge, skills and resources of the firm to the market-related needs of the business through enabling the business to add value to its goods and services and meet competitive demands. Marketing capabilities are classified by Day (1994) as three types: outside-in capabilities, inside-out capabilities, and spanning capabilities.

Outside-in capabilities: These capabilities help in understanding and participating in markets, such as being effective in using market information and building customer relationships. Developing these capabilities will require a market focusing on the corporate culture.

Inside-out capabilities: These capabilities contribute to effective market participation, such as effective financial, human resource and marketing management.

Spanning capabilities: The role of these capabilities is to integrate outside-in and inside-out capabilities, such as effective new product planning, pricing and internal communications.

Vorhies and Morgan (2005) propose a clear and tractable definition and measurement of marketing capabilities (MC) based on an integrative examination of previous studies dealing with the quality of marketing program planning and the ability of execution. Specifically, they divide MC into two subsets, namely: specific marketing capabilities and architectural marketing capabilities. Specific marketing capabilities are identified and used to transform resources into valuable outputs based on the classic marketing mix (e.g., promotion capability). Architectural marketing capabilities are used to orchestrate marketing mix capabilities and their resource inputs related to market information management, marketing strategy development and execution (Shin and Aiken, 2012).

(2-3) Customer Agility

Agility

The increasing pace of globalization, competitive rivalry and shifting customer demands create an environment in which sustained competitive advantage is difficult, if not impossible, to achieve manufacturing firms which are striving for agility to survive in the time-based competition (Christopher,2000). Agile firms are able to adapt to, and perform well, in rapidly changing environments (Sambamurthy et al.2003; Sull 2009). Agility underlies firms' success in continually enhancing and redefining their value creation and

competitive performance by capitalizing on opportunities for innovation and competitive action (32 Brown and Eisenhardt 1997; Christensen 1997; D'Aveni 1994).

Agility is emerging as an important dynamic capability in contemporary environment (Roberts and Grover, 2012). According to Goldman et al., 1995, agility is a comprehensive response to the business challenges of capitalizing on rapidly changing and continually fragmenting global markets for high-quality and customer-configured goods and services. On the other hand, Dove, 2011 indicated that agility is the ability to manage and apply knowledge effectively so that an organization has the potential to thrive in a continuously changing and unpredictable business environment. Moreover, agility is the ability of an organization to respond quickly and flexibly to its environment and meet the emerging challenges with innovative response. In addition, agility is the ability of business to grow in a competitive market of continuous and unanticipated change to respond quickly to rapidly-changing markets, driven by customer-based evaluation of products and services.

Customer Agility

The problem of how organizations can successfully deal with unpredictable, dynamic and constantly changing environments has been a topic of great interest both in industry and academe for several decades. Among the solutions proposed, adaptation, agility and flexibility have emerged as the most popular. Research on organizational adaptation investigates how the organization's form, structure, and degree of formalization influenced the ability to adapt (Burns and Stalker 1961). Studies of organizational flexibility build on adaptation research, examine the organization's ability to adapt and respond to change (Toni and Tonchia 1998; Volberda 1996). As the latest concept to

emerge, organizational agility builds on the adaptation/flexibility literature, as well as research on agile manufacturing. Table 2.1 provides numerous definitions of agility harvested from the literature.

In the following section we note the major definitions and find emerging themes shared among them.

Source	Definition
Cho et al. (1996)	The capability of surviving and prospering in a competitive environment of continuous and unpredictable change by reacting quickly and effectively to changing markets driven by customer designed products and services
Bititci et al. (1999)	The business' ability to quickly adapt and change in response to rapidly changing environmental conditions
Sharifi and Zhang (1999)	Ability to cope with unexpected changes, to survive unprecedented threats of business environment, and to take advantage of changes as opportunities
Dove (2001)	The ability to manage and apply knowledge effectively, so that an organization has the potential to thrive in a continuously changing and unpredictable business environment
Sambamurthy et al. (2003)	Partnering agility is the ability to leverage the assets, knowledge, and competencies of suppliers, distributors, contract manufacturers, and logistics providers through alliances, partnerships, and joint ventures
Arteta and Giachetti (2004)	The ability not only to respond to unanticipated change (response ability) but also to act proactively with regard to change (knowledge management)
Van Oosterhout et al. (2006)	Business agility is being able to swiftly change businesses and business processes beyond the normal level of flexibility to effectively manage unpredictable external and internal changes
Gallagher and Worrell (2008)	The ability to sense, and respond to, changes in an organization's internal and external environment by quickly assembling resources, relationships and capabilities
Setia et al. (2008)	An organization's ability to: (1) discover new opportunities for competitive advantage; (2) harness the existing knowledge, assets, and relationships to seize these opportunities; and (3) adapt to sudden changes in business conditions
Braunscheidel and Suresh (2009)	Firm's supply chain agility is the capability of the firm, internally and in conjunction with its key suppliers and customers, to adapt or respond in a speedy manner to a changing marketplace, contributing to agility of the extended supply chain

Table 2.1. [Definitions of Agility in the Extant Literature]

Goldman et al. (1995) proposed four strategic dimensions that form an agility capability: (1) enriching the customer, (2) co-operating to enhance competitiveness, (3) organizing to master changes, and (4) leveraging the impact of people and information. Customer enrichment refers to the effective delivery of value and solutions to customers, as opposed to simply offering products and services. The firm must also co-operate internally (among sub-units) and externally (with suppliers and other business partners) in order to quickly seize opportunities in the marketplace. Effective mastering of change requires flexible organizational structures that enable rapid reconfiguration of organizational resources. Finally, an agile firm continuously invests in its human resources in order to maintain future success. Dove (2001) attempts to move away from the manufacturing realm to a broader notion of enterprise agility. Specifically, Dove defines agility as the ability to manage and apply knowledge effectively. The organization's agility is dependent on its ability to adapt. Hence, Dove proposes four types of adaptable manufacturing enterprise environments: (1) product, (2) process, (3) practice, and (4) people. Furthermore, an organizational design strategy that consists of reusable components which are reconfigurable within a scalable framework can engender adaptability throughout the enterprise. Despite the value added to the agility literature, Dove's work still centers on manufacturing firms. In particular, Sambamurthy et al. (2003) defines customer agility as "the co-opting of customers in the exploration and exploitation of opportunities for innovation and competitive action moves". Customer agility is the degree to which a firm is able to sense and respond quickly to customer-based opportunities for innovation and competitive action. Our definition includes key elements of agility identified earlier, including capability, sense and respond, and speed. Customer sensing is the degree to

which a firm is able to sense customer-based opportunities for innovation and competitive action (Day 1994; Haeckel 1999; Overby et al. 2006; Sambamurthy et al. 2003). Customer responded the degree to which a firm is able to respond quickly to customer-based opportunities for innovation and competitive action. (Slater and Narver 2000). Customer-based is opportunities which originate from (1) individual customers, (2) discussions among customers, or (3) interactions between customers and a representative of the focal firm.

(2-4) Previous Studies

In this section, we will provide this study with an overview of the previous studies that tackled the main three variables: Marketing Knowledge, Marketing Capabilities, and Customer Agility.

- 1- Ching et al., 2004 conducted a study entitled "Customer Knowledge Management: A Case Study of Taiwan's Plastic Industry". This study aims to investigate customer knowledge activities of Taiwan's plastic industries. This study used data collected from 200 Taiwanese plastic industries by 300 questions were sent out. The results found that the bulk of customer knowledge comes from data related to customer purchase orders and complaints. Furthermore, marketing production as well as research and development are the main departments that develop and reuse customer knowledge.
- 2- Tsai and Shih, 2004 conducted a study entitled "The Impact of Marketing Knowledge among Managers on Marketing Capabilities and Business Performance". This study aims to examine the relationship between marketing

Customer Knowledge Management, marketing capabilities and business performance for a firm. The study sample was marketing managers of 487 large Taiwanese manufacturers of consumer goods and service firms. The result demonstrated that creating, dissemination, and storage of marketing knowledge can enhance the marketing capabilities of distribution channels, marketing research, and product/service development, promotions and pricing. Analysis also indicated that firms with superior marketing capabilities significantly surpass their rivals in terms of business performance.

- 3- Morgan et al., 2009 conducted a study entitled “Linking Marketing Capabilities with Profit Growth”. This study aims to investigate how marketing capabilities (including market sensing, brand management and customer relationship management) can determine the firm’s revenue growth and margin growth. The data were collected from a cross-industry sample of 114 firms. The results revealed that these marketing capabilities have direct and complementary effect on both revenue and margin growth rates.
- 4- Morgan et al., 2009 (B) conducted a study entitled “Marketing Orientation, Marketing Capabilities with Profit Growth”. This study aims to investigate how marketing capabilities (including market sensing, brand management and customer relationship management) can determine firms’ revenue growth and margin growth. Data were collected from a cross-industry sample of 114 firms.

The results showed that these marketing capabilities have direct and complementary effect on both revenue and margin growth rates.

- 5- Theodosious et al., 2012 conducted a study entitled: “Strategic orientations, marketing capabilities and firm performance: An empirical investigation in the context of frontline managers in service organizations”. This study develops and empirically tests a model that links alternative strategic orientations with firm performance, through the mediating effect of marketing capabilities. The impact of environmental forces and organizational characteristics on the decision to pursue lucrative strategic orientations is also examined. Data was collected from 316 bank branch managers, the authors found that market turbulence, intensity of competition and decentralization in decision making play a pivotal role in determining managerial strategic priorities. Moreover, competitor orientation and innovation orientation contribute significantly to the development of marketing capabilities. The results of this study indicated that marketing capabilities have a positive impact on firm performance.
- 6- Chien and Tsai, 2012 conducted a study entitled “ Dynamic Capabilities Marketing, Learning, and Firm Performance”. This study aims to seek to apply the dynamic capabilities framework to explore why store managers within the same chain of restaurant perform differently. Specifically, the study argues that knowledge resources and learning mechanisms are critical to the development of dynamic capabilities. The approach takes the form of an empirical data analysis. Hypotheses were tested on 132 store managers in a leading fast-food

restaurant chain in Taiwan. The results indicated that dynamic capabilities increase store performance, and that both knowledge resources and learning mechanisms have a positive effect on dynamic capabilities. In addition, the effect of knowledge resources on dynamic capability is practically mediated by the type of learning mechanism.

- 7- Roberts and Grover, 2012 conducted a study entitled "Investigation Firm's Customer Agility and Firm Performance: The Importance of Aligning Sense and Respond Capabilities". This study aims to conceptually define and operationalize firm's customer agility. The authors proposed that agility consists of two distinct capabilities, sensing and responding, and they address the issue of alignment between these capabilities and its impact on performance, using a dynamic capabilities framework. This study utilizes both matching and mediating perspectives on customer agility. Based on data collected from marketing managers, they tested hypotheses pertaining to the two methods of alignment. The results indicated significant support for the role of both forms of alignment in performance. Implications for research and practice were discussed.
- 8- Ebrahimpour, 2012 conducted a study entitled "The Relationship between Agility Capabilities and Organization Performance: A Case Study among Home Appliance Factories in Iran". This study attempts to explore the agility capabilities of manufacturing firms and their impact on organizational performance. Moreover, the study investigates the key principles and features of

the agile manufacturing companies and agile manufacturing dimensions. This study adopted the description survey method and used a questionnaire for data collection. According to the results, the data revealed that there is a significant positive relationship between agility capabilities and performance of the company in the confidence level at 99.

- 9- Chua and Banerjee, 2013 conducted a study entitled “Customer knowledge management via social media: the case of Starbucks”. This study aims to analyze the extent to which the use of social media can support customer knowledge management (CKM) in organizations relying on a traditional bricks-and-mortar business model. The paper uses a combination of qualitative case study and netnography on Starbucks, an international coffee house chain. Data retrieved from varied sources such as newspapers, newswires, magazines, scholarly publications, books, and social media services were textually analyzed. Three major findings could be culled from the paper. First, Starbucks deploys a wide range of social media tools for CKM that serve as effective brand and marketing instruments for the organization. Second, Starbucks redefines the roles of its customers through the use of social media by transforming them from passive recipients of beverages to active contributors of innovation. Third, Starbucks uses effective strategies to alleviate customers’ reluctance for voluntary knowledge sharing, thereby promoting engagement in social media.

- 10- Zahari et al., 2013 conducted a study entitled “Investigating the Relationship between Customer Knowledge Management and Knowledge Sharing among Insurance Companies in Malaysia”. This study aims to investigate the relationship between Customer Knowledge Management dimensions which consist of knowledge for customers, knowledge about customers, knowledge from the customer and knowledge sharing among insurance companies in Malaysia. Data were collected from 180 managers of insurance companies in Malaysia participated in the survey. The study showed that the three knowledge dimensions are positively and significantly related to knowledge sharing. Moreover, the results indicated that the insurance companies have implemented knowledge sharing practices, especially in securing and managing their customer data to ensure the currency, accuracy, uniqueness and completeness of the customer data. Finally, research and practical implications were discussed.
- 11- Taherparvar et al., 2014 conducted a study entitled “Customer Knowledge Management, Innovation Capability and Business Performance: A Case Study of the Banking Industry”. The purpose of this study is to examine the effect of Customer Knowledge Management (CKM) on continuous innovation and firm performance in 35 private banks in Guilan (Iran). CKM emerges as an important and effective system for innovation capability and firm's performance. However, the role of CKM in innovation and performance is not well understood. Data was collected via questionnaires from managers of private banks in Guilan. Feedback was received from 265 managers in 350 distributed questionnaires, and hypotheses were tested using the structural equation modeling. The results

of this study indicated that knowledge from customers has a positive impact on both innovation speed and innovation quality as well as on operational and financial. The results also demonstrated a different effect of knowledge about customer and knowledge for customer on various dimensions of innovation and firm's performance. By using customer's knowledge flows, firms will be aware of external environment and new changes in customers' needs; therefore, they will be more innovative and perform better.

- 12- Breznik and Hisrich, 2014 conducted a study entitled "Dynamic Capabilities Vs. Innovation Capability: Are They Related?". The purpose of this study is to provide insights into the relationship between dynamic capabilities and innovation capabilities. It links dynamic capability with innovative capability and indicates the ways they can be related. The review indicated that common characteristics exist between both fields which exhibit six relationships. Additionally, the findings revealed some inconsistencies and even contradictions.
- 13- Mohammed et al., 2014 conducted a study entitled "The Mediating Influence of Marketing Capabilities on the Relationship between Knowledge Management and Organization Performance in Hotel Industry". This empirical study examines the influence of KM (including knowledge management) on hotel performance dimensions (including financial, customer, internal process and learning and growth) in Malaysia. It also investigates the mediating effect of marketing capabilities (including planning and implementation) on the

relationship between KM and hotel performance. Data was collected using the survey method and 152 usable questionnaires were received from hotel managers. Regression analysis was conducted to test the relationships among KM, marketing capabilities and hotel performance. The results showed a positive relationship between KM and hotel performance. The results also indicated that marketing capabilities play a mediating role on the relationship between KM and hotel performance. The study suggested that KM is a main source of influence on marketing capabilities and hotel performance. By understanding the relationship among the constructs in the research model, hotel managers could maximize the utilization of their internal resources to improve organizational performance.

- 14- Chahal and Kaur, 2014 conducted a study entitled “Development of Marketing Capabilities Scale in Banking Sector”. This study aims to develop, measure and empirically validate the marketing capabilities scale in the banking sector. Data were collected from a branch manager, three next senior managers, 144 branches, 21 public and 7 private banks operating in Jammu city, North India. The findings indicated that marketing capabilities are of multi-dimensional scale, comprising three dimensions: outside-in, inside-out and spanning. Further, the study results demonstrated that all three dimensions are significantly related to marketing capabilities. The outside-in capabilities is the most dimensions strongly associated with marketing capabilities development, followed by inside-out dimensions and spanning dimensions.

15-Tseng and Lee, 2014 conducted a study entitled "The Effect of Customer Knowledge Management Capability and Dynamic Capability on Organizational Performance". The purpose of this study is how an enterprise can effectively apply its Customer Knowledge Management (CKM) capability and develop a uniquely dynamic capability in order to provide quick response to a dynamic environment that has become an urgent need. This research applied a purposive sampling method and obtained a slightly inadequate number of respondents. Therefore, it recommended that future research should apply a random sampling method to collect more responses and increase the generalizability. The results indicated that dynamic capability is an important intermediate organizational mechanism through which the benefits of KM capability are converted into performance effects at the corporate level. This means that KM capability enhances the dynamic capability of organizations, whereas dynamic capability, in turn, increases organizational performance and provides competitive advantages.

16-Kamboj et al., 2015 conducted a study entitled "Marketing capabilities and Firm Performance: Literature Review and Future Research Agenda ". This study aims to broaden the body of knowledge on marketing capabilities and firm's performance by presenting a systematic review of literature along with providing a path for future research agenda. The results found that diverse in terms of publication trend, industries, and countries were studied in reviewed articles. Product, price, promotion, and distribution were found as majorly studied measurements of marketing capabilities with mainly positive and significant impact on firm's performance. The approach takes the form of an empirical data

analysis. Hypotheses were tested on 132 store managers in a leading fast-food restaurant chain in Taiwan. The results indicated that dynamic capabilities increase store performance, and that both knowledge resources and learning mechanisms have appositive effect of knowledge resources on dynamic capabilities which are partially mediated by the type of learning mechanism.

17- Rostami, 2015, conducted a study entitled "Examining the Relationship between Marketing Capabilities and Innovation". This study aims to examining the relationship between marketing capabilities and innovation. The results revealed that there is a positive and significant relationship between marketing capabilities and innovation. The study was conducted through descriptive-applied method and the standard was a tool for data collection. The statistical population included 80 managers of stone mining industry in Isfahan, with 70 persons of them studied as research sample, using Cochran Formula. The results revealed that there is a positive and significant relationship between marketing capability and innovation.

18- Tan and Sousa, 2015 conducted a study entitled "Leveraging Marketing Capabilities into Capabilities Advantage and Export Performance". This study attempts to develop a framework to investigate the role of marketing capabilities on the firm's export performance. Specifically, this framework depicts the consequences of marketing capabilities and focuses on the relationship among marketing capabilities, competitive advantage, and export performance. The authors conducted a meta-analysis of the literature on marketing capabilities and

used multivariate analyses to test the framework. The findings revealed that competitive advantage has an important mediating role in the relationship between marketing capabilities and export performance. Specifically, the authors found two types of competitive advantage (i.e. low-cost advantage and differentiation advantage) that positively mediate the effect of marketing capabilities on export performance.

- 19- Tseng, 2016 conducted a study entitled “The effect of knowledge management capability and customer knowledge gaps on corporate performance”. This study aims to explore the influence of knowledge management capability (KMC) and customer knowledge gaps (CKG) on corporate performance, and propose concrete suggestions for filling CKG and enhancing corporate performance. In order to explore on KMC, CKG, and corporate performance, the questionnaire and partial least square (PLS) techniques were used. The results showed that KMC is the major factor for enhancing corporate performance, and suggested CKG to be a significant intervening factor between KMC and corporate performance.

Distinctive Features of the Current Study

So many scholars have studied marketing knowledge, marketing capabilities and customer agility, but they have paid little attention to customer agility and the role of marketing capabilities on the relationship between marketing knowledge and customer agility as mediator.

The study might be the first of its kind that sheds light on the indirect effect of marketing capabilities on the relationship between marketing knowledge and customer agility.

CHAPTER THREE

Study Methodology

Method and Procedures

(3-1): Introduction

(3-2): Study Methodology

(3-3): Study Population

(3-4): Study Sample

(3-5): Personal and Occupational Characteristics

(3-6): Study Tools and Data Collection

(3-7): Validity and Reliability

(3-8): Study Variables

(3-9): Statistical Treatment

(3-10): Normal Distribution of Study Variables

(3-1): Introduction

In this chapter the researcher will describe in details the methodology used in this study, and the study population and its sample .Next, the researcher describe the study unit of analysis, Personal and Occupational Characteristics, explain the study tools, the way of data collections and Study Variables. After that, the researcher will discuss the statistical treatment that is used in the analysis of the collected data. Then the researcher has tested the Normality of the study variables. In the final section the validation of the questionnaire and the reliability analysis that is applied will be clearly stated.

(3-2): Study Methodology

This study is causal approach with descriptive, quantitative in nature, aiming to investigate the Relationship Between Customer Knowledge Management and Customer Agility: The Mediating Effect of Marketing Capabilities in Five-Star Hotels in Amman. More specifically, the study intends to empirically investigate the effect of marketing capabilities on the relationship of customer knowledge management and customer agility in five star hotels in Amman. Neuma (2003) Investigation research was deemed the most suitable technique of measuring the quantitative data. Leedy and Ormrod (2005) defined Investigation research as research include gathering of information about the subject of the object to be measured from the members of the study sample and analyzing their responses to a set of predetermined questions. It starts with literature review that explores the independent variable of the study and their effect on customer agility. Then, a panel of judges will be conducted to confirm the items to be included in the questionnaire will be carried out. Empirical data were collected and analyzed through a quantitative investigate approach. This approach was chosen because the current study was concerned with testing

the validity and discerning the suitability of the constructed evaluatory model. Finally, the survey will be carried out and the data will be collected from all managers who are working in five star hotels in Amman, then the data treated through Statistical Package for Social Sciences (SPSS V.22) and (Amos V.22). Finally, the results will be compared with previous researches work.

(3-3): Study Population

The population of study includes all managers working in Five star hotels located in Amman. The number of Five-star hotels in Amman was (15) hotels.

(3-4) : Study sample

The study sample is all managers working in (11) Five – star hotels in Amman. And to the Unwillingness of four hotels of the answer. (Land mark, Marriott, Grand Hyatt Amman, Regency).

(3-5): Personal and Occupational Characteristics

The Study unit of analysis was composed of all managers who are working in five star hotels in Amman.

After distributing (165) questionnaires on sample study as shown in Table (3-1). A total of (140) from (165) answered questionnaires were retrieved, of which (8) were invalid, Therefore, (132) answered questionnaires from study unit of analysis were valid for study.

Table (3-1):Hotels names and the number of questionnaires distributed, retrieved, and good for analysis

No.	Hotels Names	No. of Questionnaires Distributed	No. of Questionnaires Retrieved	No. of Questionnaires Good for analysis
1	Kempinski	15	14	14
2	Thousand Nights	15	13	13
3	Le Royal	15	15	14
4	Holiday Inn	15	13	13
5	Crowne Plaza	15	11	11
6	Sheraton	15	10	7
7	Le Méridien	15	10	8
8	Bristol	15	14	14
9	Four Seasons	15	14	14
10	Intercontinental	15	13	13
11	Millennium	15	13	11
Total		165	140	132

Tables (3-2); (3-3); (3-4); (3-5); (3-6) and (3-7) shows the Personal and Occupational Characteristics of the unit of analysis (Gender; Age; Educational Qualification; Job (Position) Title; Number of Years of Service in the Present Job and Number of Years in Profession).

Table (3-2):Descriptive of the study sample according to Gender

Variable	Categorization	Frequency	Percent
Gender	Male	98	74.2
	Female	34	25.8
Total		132	100

Table (3-2) clarify the gender of the study sample, that (74.2) of the study sample were male and (25.8) of the study sample were female.

As well as, table (3-3) shows that the (51.5) of the study sample range aged below than 30 Years, (32.6) of the study sample range aged between 30 – 39 Years, (12.1) of the study sample range aged between 40 – 49 Years, (3) of the study sample range aged between 50 – 59 Years, Finally, (0.8) of the study sample range aged 60 Years or more.

Table (3-3):Descriptive of the study sample according to Age

Variable	Categorization	Frequency	Percent
Age	Below than 30 Years	68	51.5
	From 30 – 39 Years	43	32.6
	From 40 – 49 Years	16	12.1
	From 50 – 59 Years	4	3
	60 Years or more	1	0.8
Total		132	100

Table (3-4):Descriptive of the study sample according to Educational Qualification

Variable	Categorization	Frequency	Percent
Educational Qualification	High School	36	27.3
	Diploma	44	33.3
	BSc	41	31.1
	Master	10	7.6
	PhD	1	0.8
Total		132	100

Descriptive analysis of the Educational Qualification in the table (3-4) shows that the (27.3) of study sample having High School, (33.3) of study sample having Diploma, (31.1)

of study sample having BSc, (7.6) of study sample having Master, finally, (0.8) of study sample having PhD.

As well as, table (3-5) shows that the (3.8) of the study sample were General Director, (12.9) of the study sample were Executive Director, (15.2) of the study sample were Department Manager, (35.6) of the study sample were Head of Department, Finally, (32.6) of the study sample were Other Job Title include some portion such as (supervisor assistant manager).

Table (3-5): Descriptive of the study sample according to Job (Position) Title

Variable	Categorization	Frequency	Percent
Job (Position) Title	General Director	5	3.8
	Executive Director	17	12.9
	Department Manager	20	15.2
	Head of Department	47	35.6
	Other Job Title	43	32.6
Total		132	100

Table (3-6): Descriptive of the study sample according to Number of Years of Service in the Present Job

Variable	Categorization	Frequency	Percent
Number of Years of Service in the Present Job	5 years or less	71	53.8
	From 6 – 10 Years	35	26.5
	From 11 – 15 Years	12	9.1
	From 16 – 20 Years	13	9.8
	21 Years or more	1	0.8
Total		132	100

Table (3-6): shows that the (53.8) of the study sample range experience 5

Years or less, (26.5) of the study sample range experience between 6 – 10 Years, (9.1) of the study sample range experience between 11 – 15 Years, (9.8) of the study sample range experience between 16 – 20 Years Finally, (0.8) of the study sample range experience 21 Years or more.

Table (3-7): Descriptive of the study sample according to Number of Years in Profession

Variable	Categorization	Frequency	Percent
Number of Years in Profession	5 years or less	52	39.4
	From 6 – 10 Years	38	28.8
	From 11 – 15 Years	19	14.4
	From 16 – 20 Years	16	12.1
	21 Years or more	7	5.3
Total		132	100

Finally, table (3-7) shows that the (39.4) of the study sample range experience 5 Years or less, (28.8) of the study sample range experience between 6 – 10 Years, (14.4) of the study sample range experience between 11 – 15 Years, (12.1) of the study sample range experience between 16 – 20 Years Finally, (5.3) of the study sample range experience 21 Years or more.

(3-6): Study Tools and Data Collection

The current study is two fold, theoretical and practical. In the theoretical part, the researcher relied on the scientific studies that are related to the current study. Whereas in the practical side, the researcher relied on descriptive and analytical methods using the practical manner to collect, analyze data and test hypotheses.

The data collection, manners of analysis and programs used in the current study are based on two sources:

1. Secondary sources: Will be collected from books, journals, theses, researches, dissertations, articles, working papers, and the Worldwide Web.
2. Primary source: Framework and questionnaire will be used to collect data for the purpose of this study In this study, both primary and secondary data was used.

3. The data collected for the model was gathered through questionnaires. After conducting a thorough review of the literature pertaining to study variables, the researcher formulated the questionnaire for this study.

The questionnaire instrumental sections are as follows:

Section One: Personal and Occupational Characteristics. The Personal and Occupational Characteristics information was collected with closed-ended questions, through (6) Characteristics (Gender; Age; Educational Qualification; Job (Position) Title; Number of Years of Service in the Present Job and Number of Years in Profession).

Section Two: Customer Knowledge Management. This section was measured the Customer Knowledge Management through (3) dimensions (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer); (19) items as follows:

Customer Knowledge Management	Knowledge for Customer	Knowledge from Customer	Knowledge about Customer
No. of items	7	5	7
Items Arrangement	7 - 1	12 - 8	19 - 13

Section Three: Marketing Capabilities. This section was measured the Marketing Capabilities through (6) dimensions (Planning & Marketing Research Development, Product Development, Pricing, Distribution Channels, Promotion, and Marketing Management); (21) items as follows:

Marketing Capabilities	Planning & Marketing Research Development	Product Development	Pricing	Distribution Channels	Promotion	Marketing Management
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No. of items	4	3	3	3	3	5
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Items Arrangement	23 - 20	26 - 24	29 - 27	32 - 30	35 - 33	40 - 36
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Section Four: Customer Agility. This section was measured the Customer Agility

through (2) dimensions (Sensing and Responding); (10) items as follows:

Customer Agility	Sensing	Responding
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No. of items	5	5
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Items Arrangement	45 - 41	50 - 46
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All items of the questionnaire were measured on a Likert-type scale as follows:

Strongly Agree	I Agree	Neutral	disagree	Strongly disagree
5	4	3	2	1

(3-7): Validity and Reliability

(3-7-1): Face Validity

To test the questionnaire for clarity and to provide a coherent research questionnaire, a macro review that covers all the research constructs was thoroughly performed by academic reviewers from Middle East University and other universities specialized in faculty and practitioners Business Administration, Marketing. Some items were added, while others were dropped based on their valuable recommendations. Some others were reformulated to become more accurate to enhance the research instrument. The academic reviewers are (7) and the overall percentage of respond is (100%), (see appendix “1”).

(3-7-2): Construct Validity

(3-7-2-1): Exploratory Factor Analysis

To assess construct validity, Exploratory Factor Analysis (EFA) was performed. The components of the Customer Knowledge Management, Marketing Capabilities, and Customer Agility constructs were tested in order to confirm the dimensions of the concept which have been defined and to indicate which of the items are most appropriate for each dimension (Sekaran & Bougie, 2010). To conduct the EFA, four assumptions were followed (Hair et al., 2010):

1. Sampling adequacy (Kaiser-Meyer-Olkin measure greater than 0.5).
2. The minimum Eigen value for each factor to be one.
3. A factor loading of 0.50 for each item as the threshold for item retention.

4. Varimax rotation was used. Kaiser's measure of sampling adequacy (KMO).

For Customer Knowledge Management dimensions exploratory factor analysis, the KMO measure was (0.840), Bartlett's test of Sphericity Chi-square χ^2 was statistically significant ($p \leq 0.00$) in all cases. Based on that, factor analysis is important for data analysis in all instances. In addition to that, eigen values for the resulting factors in the cases of all constructs were greater than one (1), and all items had loadings greater than (0.5). Fulfilling the aforementioned assumptions, a three-factor model of Customer Knowledge Management emerged explaining 58.973% of the total variance.

Two items of the 19 items originally developed to measure the Customer Knowledge Management construct were deleted (item 4 and 6) remaining 17 items loaded on three factors.

Factor one, with 25.440% of the total variance, was labeled "Knowledge for Customer" and includes (9) items with numbers (5, 12, 13, 14, 15, 16, 17, 18, and 19)

Factor two, with 19.799% of the total variance, was labelled "Knowledge from customer" and includes (5) items with numbers (7, 8, 9, 10, and 11).

Factor three, with 13.733% of total variance, was labelled "Knowledge about Customer" and includes (3) items with numbers (1, 2, and 3).

Tables (3-8) show the results of EFA for the Customer Knowledge Management dimensions (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer).

Table (3-8): Exploratory Factor Analysis results for Customer Knowledge Management constructs

Questions		Factor 1 Knowledge for Customer	Factor 2 Knowledge from Customer	Factor 3 Knowledge about Customer
5	Hotel provides a data base through which employees can easily find the knowledge they need quite rapidly.	0.501		
12	Hotel Management seeks to adjust the new products/services on the basis of customers' comments and remarks.	0.518		
13	The information available about customers helps the Hotel to determine the most important customers.	0.615		
14	Hotel is interested in designing marketing activities which are most appropriate to customers of the highest value (profitability).	0.801		
15	Hotels has designed special marketing activities based on their personal preferences.	0.695		
16	Hotel compares the statistical data in terms of average success of customer-oriented marketing activities.	0.801		
17	Hotel assigns specialized personnel from the Marketing Department to discuss customers' future needs.	0.721		
18	The technological infrastructure is available for disseminating customer knowledge between departments and subdivisions.	0.725		
19	Customer data base is used to facilitate the tracing process and transparency of customer knowledge	0.690		
7	Customers are repeatedly informed of new developments related to products/services		0.681	
8	Hotel tends to store all customer proposals (including complaints) in the data base		0.775	
9	Hotel reviews regularly customers' proposals (including complaints) stored in the data base		0.757	
10	Hotel publishes on its website solutions to repeated problems so that customers will on their own find these solutions		0.542	
11	The process of collecting data from customers will help us to be diligent in terms of developing new products/services		0.740	
1	Hotel can meet customer needs			0.775

2	Hotel can answer customer inquiries in a professional manner			0.813
3	Hotel can assist in solving customer's problems quickly			0.745

For Marketing Capabilities dimensions exploratory factor analysis, the KMO measure was (0.890), Bartlett's test of Sphericity Chi-square χ^2 was statistically significant ($p \leq 0.00$) in all cases. Based on that, factor analysis is important for data analysis in all instances. In addition to that, eigen values for the resulting factors in the cases of all constructs were greater than one (1), and all items had loadings greater than (0.5).

Fulfilling the aforementioned assumptions, a four-factor model of Marketing Capabilities emerged explaining 64.771% of the total variance.

Four items of the 21 items originally developed to measure the Marketing Capabilities construct was deleted (items 25, 29, 39 and 40) remaining 17 items loaded on four factors.

Factor one, with 26.161% of the total variance, was labeled "Marketing Research" and includes (5) items with numbers (20, 21, 22, 23, and 24)

Factor two, with 16.088% of the total variance, was labeled "Pricing & Product development" and includes (3) items with numbers (26, 27 and 28).

Factor three, with 14.483% of total variance, was labeled "Distribution Channels" and includes (3) items with numbers (30, 31, and 32).

Factor four, with 8.039% of total variance, was labeled "Promotion & Market Management" and includes (6) items with numbers (33, 34, 35, 36, 37 and 38).

Tables (3-9) show the results of EFA for the Marketing Capabilities dimensions (Marketing Research, Pricing & Product development, Distribution Channels and Promotion & Market Management).

Table (3-9): Exploratory Factor Analysis results for Marketing Capabilities constructs

	Questions	Factor 1 Marketi ng Researc h	Factor 2 Pricing & Product development	Factor 3 Distributi on Channels	Factor 4 Promotion & Market Managemen t
20	Hotel uses its marketing researches as a helpful means of finding more new customers than its competitors	0.666			
21	Hotel uses its capacities in marketing researches in order to develop effective marketing programs in terms of identifying target customers and their needs along with the proper technology to meet such needs	0.723			
22	Hotel uses its marketing research information more effectively than its competitors	0.788			
23	The Marketing Department at the Hotel seeks to develop marketing programs which are better than those of its competitors in terms of identifying target customers and their needs along with the proper technology to meet such needs	0.713			
24	Hotel is capable of developing products better than those of its competitors	0.811			
26	Product development imparts on the Company edge in the market		0.681		
27	Pricing methodology of the Hotel yields major impact on success of marketing programs		0.831		
28	Pricing methodology is more efficient than those of competitors		0.670		
30	The distribution system of the Hotels is more efficient than competitors' systems			0.787	
31	Hotel enjoys better relations with distributors than those of competitors			0.689	
32	Hotel works more closely with distributors than competitors do			0.615	
33	Advertising is a vital element of promotional programs for the Hotel				0.566
34	Hotels has methods of selling which are more efficient than those of competitors such as using websites of social communication networks				0.614
35	Hotel has advertising programs which are more efficient than those of competitors				0.556
36	Hotel is capable of dividing the market into sectors which will help the Hotel to compete more effectively				0.589
37	Hotel is capable of identifying the target market which will help the hotel to compete more effectively				0.596
38	Hotel is capable of managing the marketing programs in an effective manner compared to competitors				0.502

For Customer Agility dimensions exploratory factor analysis, the KMO measure was (0.911), Bartlett's test of Sphericity Chi-square χ^2 was statistically significant ($p \leq 0.00$) in all cases. Based on that, factor analysis is important for data analysis in all instances. In addition to that, eigen values for the resulting factors in the cases of all constructs were greater than one (1) , and all items had loadings greater than (0.5).

Fulfilling the aforementioned assumptions, a one-factor model of Customer Agility emerged explaining 59.412% of the total variance.

All 10 items with numbers (41, 42, 43, 44, 45, 46, 47, 48, 49 & 50) originally developed to measure the Customer Agility construct was loaded on one factors labeled Customer Agility (Sensing & Responding).

Tables (3-10) show the results of EFA for the Customer Agility (Sensing & Responding).

Table (3-10): Exploratory Factor Analysis results for Customer Agility (Sensing & Responding) constructs

Questions		Customer Agility (Sensing & Responding)
41	Hotel Management always seeks to explore additional customer needs of which they are not aware	0.639
42	Hospital Management seeks to anticipate the main trends towards gaining insight into the future needs of current market users	0.772
43	Hotel Management always seeks to anticipate customer needs even before customers discern such needs	0.852
44	Hotel Management seeks to develop new methods to look into customers and their needs	0.849
45	Hotel Management seeks to envisage customer needs even before customers disclose such needs	0.756
46	Hotel Management seeks to carry out quickly the customer-related activities already planned for	0.793
47	Hotel Management seeks to respond rapidly to customer-related basic changes	0.744
48	Hotel Management seeks to respond quickly if anything important takes place insofar as our customers are concerned	0.786
49	Hotel Management seeks to identify new customer needs and to respond to those needs quickly	0.795
50	Hotel Management responds swiftly to changes in terms of needs of our customer products or services	0.695

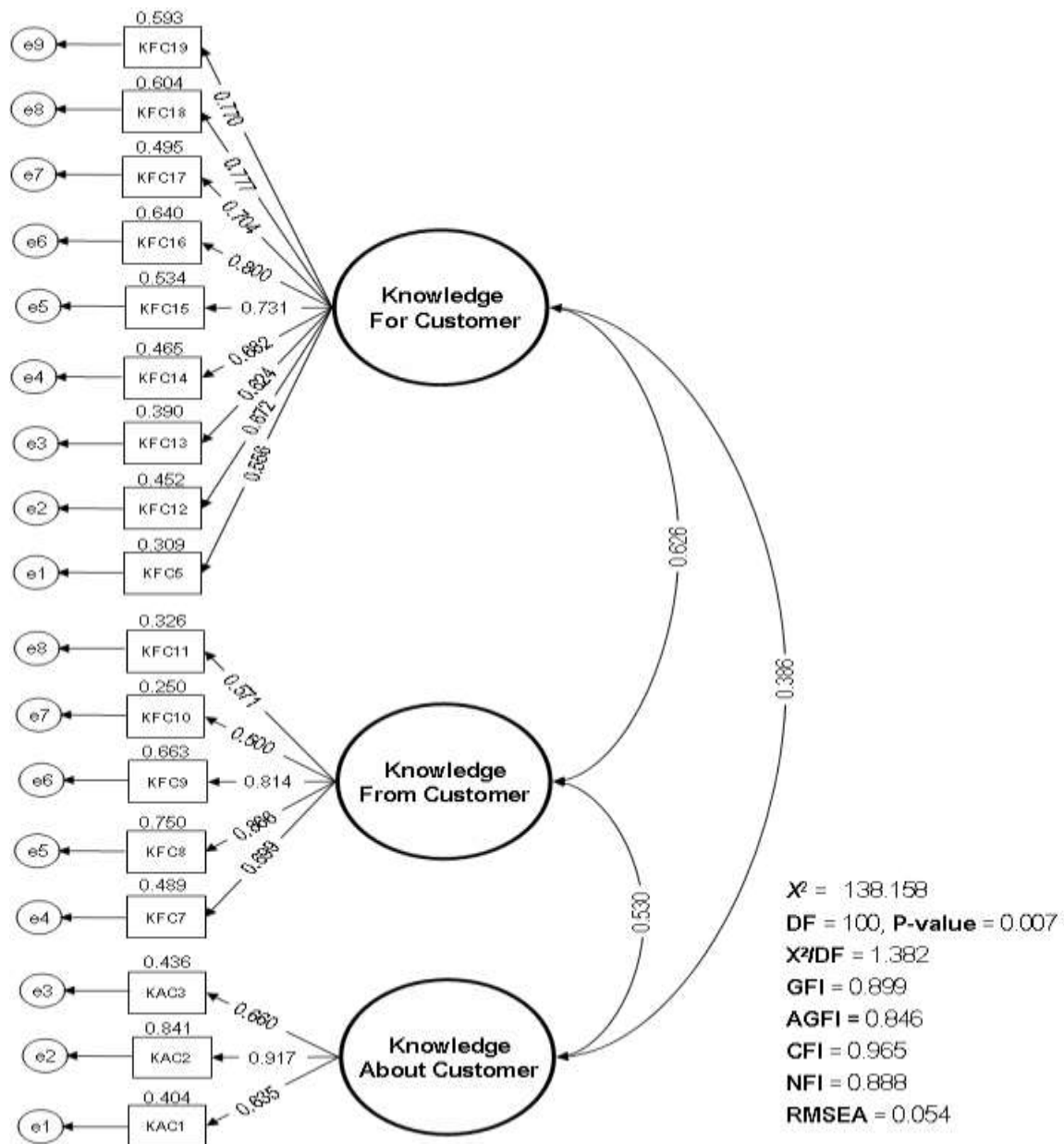
(3-7-2-2): Confirmatory Factor Analysis

Customer Knowledge Management is presented by three dimensions and (18) items and based on results of the confirmatory factor analysis as shown in figure (3-5),

Customer Knowledge Management dimensions (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer).

Customer Knowledge Management constructs indicate an excellent fit with χ^2 statistic of (138.158) with $DF = 100$ and $p < 0.007$, with the χ^2/df ratio having a value of (1.382). Arbuckle (2008) suggested that it should be less than 5 which indicating good fit. In contrast, GFI and AGFI values were 0.899 and 0.846, respectively. Both values were within acceptable limits. In addition, NFI and CFI values were 0.888 and 0.965, respectively, both values were acceptable. These values are very close to (1.0) where a value of (1.0) indicates perfect fit (Hair, et. al., 2006). The next set of fit statistics focus on the root mean square error of approximation “RMSEA” which is (0.054). Hair, et. al., (2006) proposed that values less than (0.08) indicates good fit. With regard to factor loadings, the standardized coefficient estimates are between (0.500) and (0.917). All these are considered good which is above the acceptable level of (0.000). Figure (3-1) shows the results of the confirmatory factor analysis to Customer Knowledge Management dimensions.

Figure (3-1): Results of the confirmatory factor analysis to Customer Knowledge Management

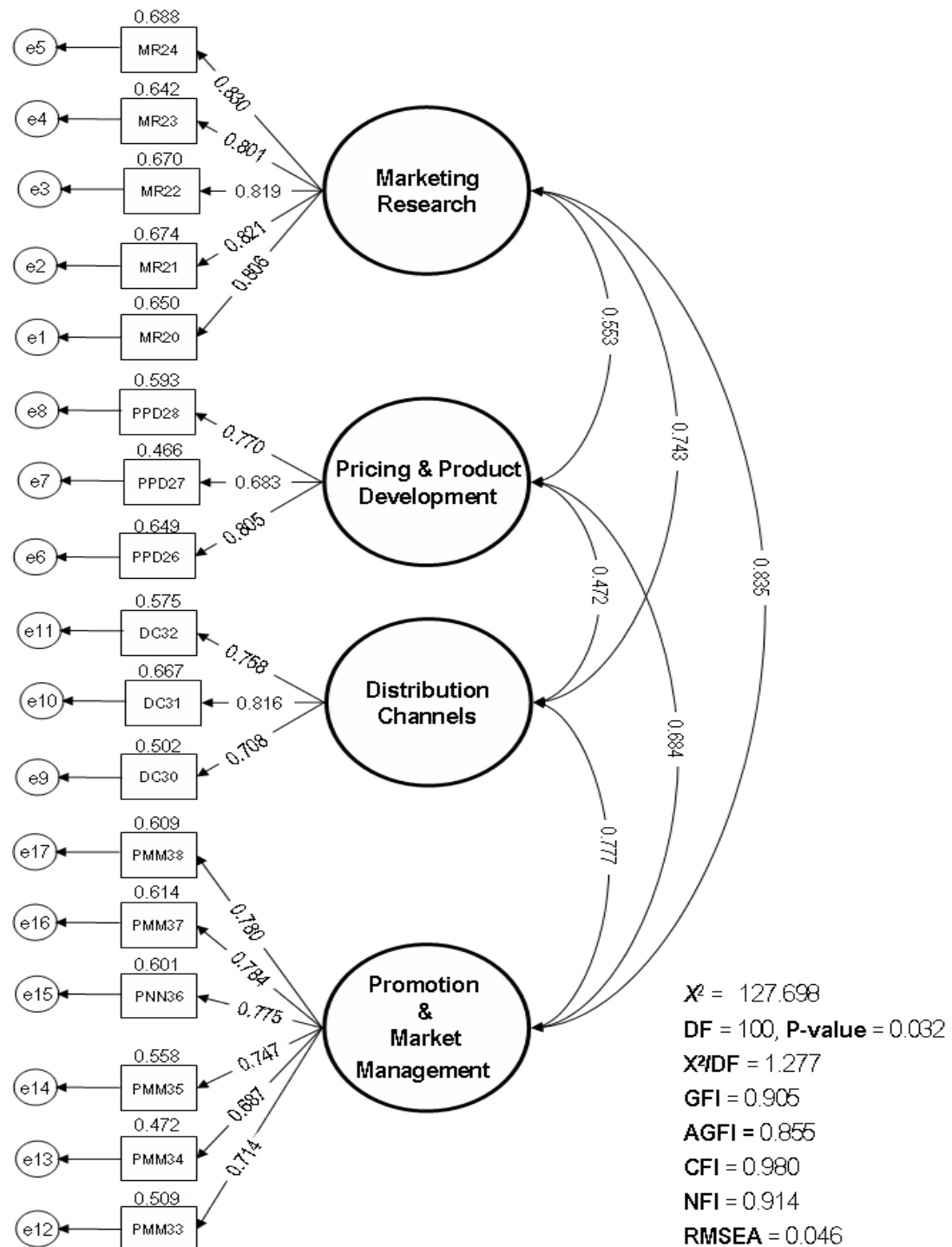


Based on the analysis, the researcher found that all of the standardized loadings were over (0.50) as Janssens, et. al., (2008) argue that the factor loading for each latent variable be equal to or greater than (0.50), and must also be significant.

Marketing Capabilities is presented by six dimensions and (21) items. Based on results of the confirmatory factor analysis Marketing Capabilities dimensions factors shrunk to four factors have been renamed (Marketing Research, Pricing & Product development, Distribution Channels and Promotion & Market Management).

Marketing Capabilities constructs indicate an excellent fit with χ^2 statistic of (127.698) with $DF = 100$ and $p < 0.032$, with the χ^2 / df ratio having a value of (1.277). Arbuckle (2008) suggested that it should be less than 5 which indicating good fit. In contrast, GFI and AGFI values were 0.905 and 0.855, respectively. Both values were within acceptable limits. In addition, NFI and CFI values were 0.914 and 0.980, respectively, both values were acceptable. These values are very close to (1.0) where a value of (1.0) indicates perfect fit (Hair, et. al., 2006). The next set of fit statistics focus on the root mean square error of approximation “RMSEA” which is (0.046) Hair, et. al., (2006) proposed that values less than (0.08) indicates good fit. With regard to factor loadings, the standardized coefficient estimates are between (0.683) and (0.830). All these are considered good which is above the acceptable level of (0.000). Figure (3-2) shows the results of the confirmatory factor analysis to Marketing Capabilities dimensions.

Figure (3-2): Results of the confirmatory factor analysis to Marketing Capabilities

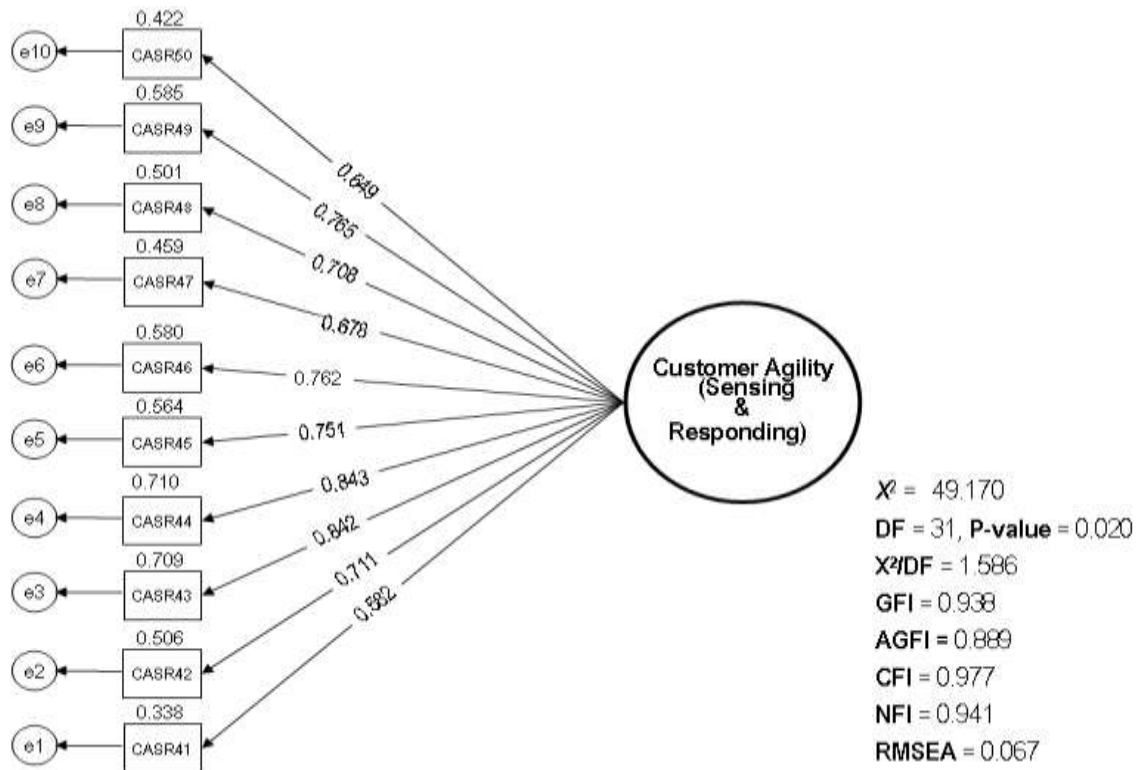


Based on the analysis, the researcher found that all of the standardized loadings were over (0.50) as Janssens, et. al., (2008) argue that the factor loading for each latent variable be equal to or greater than (0.50), and must also be significant.

Customer Agility is presented by (2) dimensions and (10) items. Based on results of the confirmatory factor analysis Customer Agility dimensions factors shrunk to one factors have been renamed Customer Agility (Sensing & Responding).

Customer Agility constructs indicate an excellent fit with χ^2 statistic of (49.170) with $DF = 31$ and $p < 0.020$, with the χ^2 / df ratio having a value of (1.586). Arbuckle (2008) suggested that it should be less than 5 which indicating good fit. In contrast, GFI and AGFI values were 0.938 and 0.889, respectively. Both values were within acceptable limits. In addition, NFI and CFI values were 0.941 and 0.977, respectively, both values were acceptable. These values are very close to (1.0) where a value of (1.0) indicates perfect fit (Hair, et. al., 2006). The next set of fit statistics focus on the root mean square error of approximation “RMSEA” which is (0.067) Hair, et. al., (2006) proposed that values less than (0.08) indicates good fit. With regard to factor loadings, the standardized coefficient estimates are between (0.582) and (0.843). All these are considered good which is above the acceptable level of (0.000). Figure (3-3) shows the results of the confirmatory factor analysis to Customer Agility (Sensing & Responding).

Figure (3-3): Results of the confirmatory factor analysis to Customer Agility (Sensing & Responding)



Based on the analysis, the researcher found that all of the standardized loadings were over (0.50) as Janssens, et. al., (2008) argue that the factor loading for each latent variable be equal to or greater than (0.50), and must also be significant.

(3-7-3): Reliability

Cronbach's alpha, was used to determine the internal consistency reliability of the elements comprising the four constructs as suggested by Gregory (2004) Reliability should be (0.60) or higher to indicate adequate convergence or internal consistency .

The results shown in Table (3-11) are acceptable levels as suggested by (Bougie, 2010: 184).

Table (3-11): Reliability of Questionnaires Dimensions

No.	Variable	Dimensions	No of items	Cronbach's alpha Value
1	Customer Knowledge Management		17	0.907
	(1-1)	Knowledge for Customer	9	0.897
	(1-2)	Knowledge from Customer	5	0.818
	(1-3)	Knowledge about Customer	3	0.774
2	Marketing Capabilities		17	0.938
	(2-1)	Marketing Research	5	0.902
	(2-2)	Pricing & Product Development	3	0.728
	(2-3)	Distribution Channels	3	0.805
	(2-4)	Promotion & Market Management	6	0.883
3	Customer Agility (Sensing & Responding)		10	0.923

(3-8): Study Variables

The researcher identifies and measures the independent Variable (customer Knowledge management) through literature review based on (McColl & Moore, 2011). As well as, to identify and measure the mediate Variable (marketing capabilities) the researcher adopted the proposed idea form (Kim, 2012). Finally, the researcher identifies and measures the dependent Variable (brand) through literature review based on (Park, et. al., 2007).

All variables will be measured by five-point Likert-type scale to tap into the respondents' perceptions, ranging from value 1 (Never) to value 5 (Always) used throughout the questionnaire.

(3-9): Statistical Treatment

The data collected from the responses of the study questionnaire were used through Statistical Package for Social Sciences “SPSS Ver.22” & “Amos V.22” for analysis and conclusions. Finally, the researcher used the suitable statistical methods that consist of:

(3-9-1): Descriptive Statistics Methods

- Percentage and Frequency.
- Arithmetic to identify the level of response of study sample individuals to the study variables.
- Standard Deviation to Measure the responses spacing degree about Arithmetic Mean.
- Relative importance, assigned due to:
 The Low degree from 1- less than 2.33
 The Medium degree from 2.33 – 3.66
 The High degree from 3.67 and above.

$$\text{Class Interval} = \frac{\text{Maximum Class} - \text{Minimum Class}}{\text{Number of Level}}$$

$$\text{Class Interval} = \frac{5 - 1}{3} = \frac{4}{3} = 1.33$$

(3-9-2): Inference Statistics Methods

- Exploratory Factor Analysis.
- Confirmatory Factor Analysis.
- Cronbach Alpha reliability (α) to measure strength of the correlation and coherence between questionnaire items.
- Kolmogorov-Smirnov Normality Test to verify the normal distribution of variables.
- One sample t-test.
- Variance Inflation Factor and Tolerance to make sure that there are no Multicollinearity between independent variables.
- Multiple Regression analysis to Measure the effect of Independent Variables and mediate Variable on dependent Variable.
- Path Analysis to measure the indirect effect of independent variables on dependent variable through the mediate variables.

(3-10): Normal Distribution of Study Variables

In order of verification of the study results, the researcher carry out the Kolmogorov - Smirnov Test, to verify the absence study data from the statistical problems that may adversely affect the results of the test study hypotheses, as is shown in the table (3-12).

Table (3-12): Normal Distribution of Study Variables

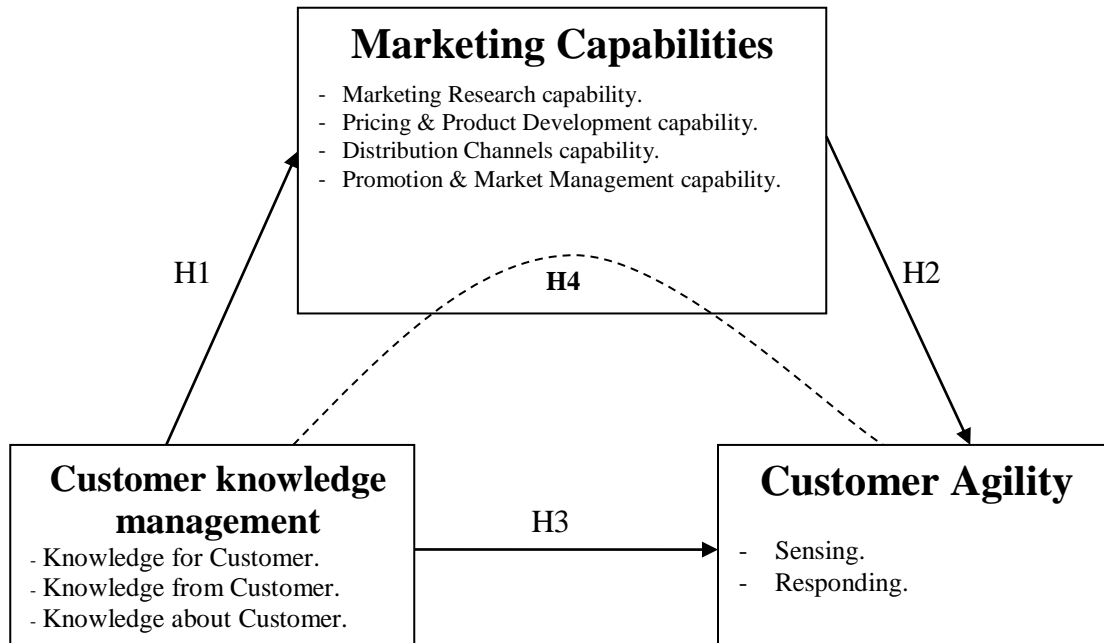
No.	Variable		Kolmogorov – Smirnov	Sig.*	Result
1	Customer Knowledge Management		2.987	0.116	Follows a normal distribution
	(1-1)	Knowledge for Customer	1.568	0.068	Follows a normal distribution
	(1-2)	Knowledge from Customer	1.249	0.088	Follows a normal distribution
	(1-3)	Knowledge about Customer	1.217	0.074	Follows a normal distribution
2	Marketing Capabilities		1.234	0.083	Follows a normal distribution
	(2-1)	Marketing Research	1.269	0.080	Follows a normal distribution
	(2-2)	Pricing & Product Development	2.933	0.092	Follows a normal distribution
	(2-3)	Distribution Channels	1.593	0.079	Follows a normal distribution
	(2-4)	Promotion & Market Management	1.487	0.056	Follows a normal distribution
3	Customer Agility (Sensing & Responding)		2.040	0.063	Follows a normal distribution

Distribution is normal when the significance level ($0.05 > \alpha$).*

In view of the above table and at the significance level of ($\alpha > 0.05$) it is apparent that the distribution of all variables was normal. Where the normal distribution ratios for each variables is greater than (0.05) which is approved level in the statistical treatment of the current study.

Based on the above , the study model become as follows:

(3-4) StudyModel



CHAPTER FOUR

Analysis Results & Hypotheses Test

- (4-1): Introduction.
- (4-2): Descriptive analysis of study variables.
- (4-3): Analysis adequacy of the data to test the study hypotheses
- (4-4): Study Hypotheses Test

(4-1): Introduction

According to the purpose of the research and the research framework presented in the previous chapter, this chapter describes the results of the statistical analysis for the data collected according to the research questions and research hypotheses. The data analysis includes a description of the Means, Standard Deviations for the questions of the study simple regression analysis and path analysis.

(4-2): Descriptive Analysis of Study Variables

(4-2-1): Customer Knowledge Management

The researcher used the arithmetic mean, standard deviation, one sample t-test, item importance and importance level as shown in Table (4-1), (4-2) and (4-3).

Table (4-1) clarifies the importance level of Knowledge for customer, where the arithmetic mean for these variable ranges between (3.886 - 4.333) compared with General Arithmetic mean amount of (4.064). We observe that the highest mean for the **"The information available about customers helps the Hotel to determine the most important customers"** with arithmetic mean (4.333), Standard deviation (0.748). The lowest arithmetic mean was for the **"Hotels have designed special marketing activities based on their personal preferences"** With Average (3.886) and Standard deviation (0.938). In general, it appears that the Importance level of Knowledge for customer from the study sample viewpoint was high.

Table (4-1): Arithmetic mean, SD, one sample t-test, item importance and importance level of Knowledge for customer

No.	Knowledge for customer	Mean	St.D	t-value Calculate	Sig	Item importance	Importance level
5	Hotel provides a data base through which employees can easily find the knowledge they need quite rapidly.	4.106	.081 2	15.637	0.00 0	4	High
12	Hotel Management seeks to adjust the new products/services on the basis of customers' comments and remarks.	4.12 8	.081 4	15.931	0.00 0	3	High
13	The information available about customers helps the Hotel to determine the most important customers.	4.33 3	.074 8	20.474	0.00 0	1	High
14	Hotel is interested in designing marketing activities which are most appropriate to customers of the highest value (profitability).	4.14 3	.080 2	16.387	0.00 0	2	High
15	Hotels have designed special marketing activities based on their personal preferences.	3.88 6	.093 8	10.855	0.00 0	9	High
16	Hotel compares the statistical data in terms of average success of customer-oriented marketing activities.	3.96 2	.089 4	12.358	0.00 0	7	High
17	Hotel assigns specialized personnel from the Marketing Department to discuss customers' future needs.	3.90 9	.088 6	11.784	0.00 0	8	High
18	The technological infrastructure is available for disseminating customer	4.03 0	.078 0	15.159	0.00 0	6	High

	knowledge between departments and subdivisions.						
19	Customer data base is used to facilitate the tracing process and transparency of customer knowledge	4.075	.7870	15.694	0.000	5	High
General Arithmetic mean and standard deviation		4.064	.6150	19.869	0.000	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

Table (4-2) clarifies the importance level of Knowledge from customer, where the arithmetic mean for these variable ranges between (3.719 - 4.197) compared with General Arithmetic mean amount of (4.064). We observe that the highest mean for the "**Customers are repeatedly informed of new developments related to products/services**" with arithmetic mean (4.197), Standard deviation (0.775). The lowest arithmetic mean was for the "**Hotel publishes on its website solutions to repeated problems so that customers will on their own find these solutions**" With Average (3.719) and Standard deviation (1.043). In general, it appears that the Importance level of Knowledge from customer from the study sample viewpoint was high.

Table (4-2): Arithmetic mean, SD, one sample t-test, item importance and importance level of Knowledge from customer

No.	Knowledge from customer	Mean	St.D	t-value Calculate	Sig	Item importance	Importance level
7	Customers are repeatedly informed of new developments related to products/services	4.197	.7750	17.723	0.000	1	High
8	Hotel tends to store all customer proposals (including complaints) in the data base	4.189	.8390	16.283	0.000	2	High
9	Hotel reviews regularly customers' proposals (including complaints) stored in the data base	4.083	.8820	14.100	0.000	4	High
10	Hotel publishes on its website solutions to repeated problems so that customers will on their own find these solutions	3.719	1.043	7.924	0.000	5	High
11	The process of collecting data from customers will help us to be diligent in terms of developing new products/services	4.174	.7760	17.374	0.000	3	High
General Arithmetic mean and standard deviation		4.064	.6150	18.635	0.000	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

Finally, table (4-3) clarifies the importance level of Knowledge about customer, where the arithmetic mean for these variable ranges between (4.386 - 4.522) compared with

General Arithmetic mean amount of (4.436). We observe that the highest mean for the **"Hotel can meet customer needs"** with arithmetic mean (4.522), Standard deviation (0.530). The lowest arithmetic mean was for the **"Hotel can assist in solving customer's problems quickly"** With Average (4.386) and Standard deviation (0.600). In general, it appears that the Importance level of Knowledge about customer from the study sample viewpoint was high.

Table (4-3): Arithmetic mean, SD, one sample t-test, item importance and importance level of Knowledge about customer

No.	Knowledge about customer	Mean	St.D	t-value Calculate	Sig	Item importance	Importance level
1	Hotel can meet customer needs	4.522	.5300	32.949	0.000	1	High
2	Hotel can answer customer inquiries in a professional manner	4.401	.5770	27.873	0.000	2	High
3	Hotel can assist in solving customer's problems quickly	4.386	.6000	26.509	0.000	3	High
General Arithmetic mean and standard deviation		4.436	.4730	34.869	0.000	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

(4-2-2): Marketing Capabilities

The researcher used the arithmetic mean, standard deviation, one sample t-test, item importance and importance level as shown in Table (4-4), (4-5), (4-6) and (4-7).

Table (4-4) clarifies the importance level of Marketing Research, where the arithmetic mean for these variable ranges between (3.810 - 3.931) compared with General Arithmetic mean amount of (3.901). We observe that the highest mean for the **"The Marketing Department at the Hotel seeks to develop marketing programs which are better than those of its competitors in terms of identifying target customers and their needs along with the proper technology to meet such needs"** with arithmetic mean (3.931), Standard deviation (0.975). The lowest arithmetic mean was for the **"Hotel uses its marketing research information more effectively than its competitors"** With Average (3.810) and Standard deviation (0.820). In general, it appears that the Importance level of Marketing Research from the study sample viewpoint was high.

Table (4-4): Arithmetic mean, SD, one sample t-test, item importance and importance level of Marketing Research

No.	Marketing Research	Mean	St.D	t- value Calcula te	Sig	Item importa nce	Importa nce level
20	Hotel uses its marketing researches as a helpful means of finding more new customers than its competitors	3.924	.8790	12.079	0.00 0	2	High
21	Hotel uses its capacities in marketing researches in order to develop effective marketing programs in terms of identifying target customers and their needs along with the proper technology to meet such needs	3.924	.8430	12.586	0.00 0	2	High
22	Hotel uses its marketing research information more effectively than its competitors	3.810	.8200	11.346	0.00 0	5	High
23	The Marketing Department at the Hotel seeks to develop marketing programs which are better than those of its competitors in terms of identifying target customers and their needs along with the proper technology to meet such needs	3.931	.8750	12.230	0.00 0	1	High
24	Hotel is capable of developing products better than those of its competitors	3.916	.9330	11.286	0.00 0	4	High
General Arithmetic mean and standard deviation		3.901	.738 0	14.022	0.00 0	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

Table (4-5) clarifies the importance level of Pricing & Product development, where the arithmetic mean for these variable ranges between (4.022 - 4.287) compared with General Arithmetic mean amount of (4.189). We observe that the highest mean for the **"Product development imparts on the Company edge in the market"** with arithmetic mean (4.287), Standard deviation (0.648). The lowest arithmetic mean was for the **"Pricing methodology is more efficient than those of competitors"** With Average (4.022) and Standard deviation (0.725). In general, it appears that the Importance level of Pricing & Product development from the study sample viewpoint was high.

Table (4-5): Arithmetic mean, SD, one sample t-test, item importance and importance level of Pricing & Product development

No.	Pricing & Product development	Mean	St.D	t- value Calcula te	Sig	Item importa nce	Importa nce level
26	Product development imparts on the Company edge in the market	4.287	.6480	22.823	0.00 0	1	High
27	Pricing methodology of the Hotel yields major impact on success of marketing programs	4.257	.6490	22.250	0.00 0	2	High
28	Pricing methodology is more efficient than those of competitors	4.022	.7250	16.198	0.00 0	3	High
General Arithmetic mean and standard deviation		4.189	.543 0	25.138	0.00 0	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

Table (4-6) clarifies the importance level of Distribution Channels, where the arithmetic mean for these variable ranges between (3.878- 3.909) compared with General Arithmetic mean amount of (3.896). We observe that the highest mean for the **"The distribution system of the Hotels is more efficient than competitors' systems"** with arithmetic mean (3.909), Standard deviation (0.795). The lowest arithmetic mean was for the **"Hotel works more closely with distributors than competitors do"** With Average (3.878) and Standard deviation (0.819). In general, it appears that the Importance level of Distribution Channels from the study sample viewpoint was high.

Table (4-6): Arithmetic mean, SD, one sample t-test, item importance and importance level of Distribution Channels

No.	Distribution Channels	Mean	St.D	t- value Calculate	Sig	Item importance	Importance level
30	The distribution system of the Hotels is more efficient than competitors' systems	3.909	.7950	13.129	0.000	1	High
31	Hotel enjoys better relations with distributors than those of competitors	3.901	.8270	12.516	0.000	2	High
32	Hotel works more closely with distributors than competitors do	3.878	.8190	12.314	0.000	3	High
General Arithmetic mean and standard deviation		3.896	.6900	34.869	0.000	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

Table (4-7) clarifies the importance level of Promotion & Market Management, where the arithmetic mean for these variable ranges between (3.939 - 4.015) compared with General Arithmetic mean amount of (3.979). We observe that the highest mean for the **"Hotel is capable of managing the marketing programs in an effective manner compared to competitors"** with arithmetic mean (4.015), Standard deviation (0.837). The lowest arithmetic mean was for the **"Hotel has advertising programs which are more efficient than those of competitors"** With Average (3.939) and Standard deviation (0.817). In general, it appears that the Importance level of Promotion & Market Management from the study sample viewpoint was high.

Table (4-7): Arithmetic mean, SD, one sample t-test, item importance and importance level of Promotion & Market Management

No.	Promotion & Market Management	Mean	St.D	t- value Calculate	Sig	Item importance	Importance level
33	Advertising is a vital element of promotional programs for the Hotel	3.992	.7660	14.873	0.000	2	High
34	Hotels has methods of selling which are more efficient than those of competitors such as using websites of social communication networks	3.977	.8600	13.053	0.000	4	High
35	Hotel has advertising programs which are more efficient than those of competitors	3.939	.8170	13.205	0.000	6	High
36	Hotel is capable of dividing the market into sectors which will help the Hotel to compete more effectively	3.992	.7860	14.501	0.000	2	High
37	Hotel is capable of identifying the target market which will help the hotel to compete more effectively	3.962	.7350	15.035	0.000	5	High
38	Hotel is capable of managing the marketing programs in an effective manner compared to competitors	4.015	.8370	13.920	0.000	1	High
General Arithmetic mean and standard deviation		3.979	.6360	17.688	0.000	-	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

(4-2-2): Customer Agility (Sensing & Responding)

The researcher used the arithmetic mean, standard deviation, one sample t-test, item importance and importance level as shown in Table (4-8).

Table (4-8) clarifies the importance level of Customer Agility (Sensing & Responding), where the arithmetic mean for these variable ranges between (3.901-4.136) compared with General Arithmetic mean amount of (4.009). We observe that the highest mean for the **"Hotel Management seeks to respond quickly if anything important takes place insofar as our customers are concerned"** with arithmetic mean (4.136), Standard deviation (0.826). The lowest arithmetic mean was for the **"Hotel Management always seeks to anticipate customer needs even before customers discern such needs"** With Average (3.901) and Standard deviation (0.799). In general, it appears that the Importance level of Customer Agility (Sensing & Responding) from the study sample viewpoint was high.

Table (4-8):Arithmetic mean, SD, one sample t-test, item importance and importance level of Customer Agility (Sensing & Responding)

No.	Customer Agility (Sensing & Responding)	Mean	St.D	t- value Calculate	Sig	Item importance	Importance level
41	Hotel Management always seeks to explore additional customer needs of which they are not aware	4.068	.7220	16.986	0.000	2	High
42	Hospital Management seeks to anticipate the main trends towards gaining insight into the future needs of current market users	4.015	.7610	15.316	0.000	5	High
43	Hotel Management always seeks to anticipate customer needs even before customers discern such needs	3.901	.7990	12.956	0.000	10	High
44	Hotel Management seeks to develop new methods to look into customers and their needs	3.977	.8140	13.783	0.000	7	High
45	Hotel Management seeks to envisage customer needs even before customers disclose such needs	3.909	.8330	12.538	0.000	9	High
46	Hotel Management seeks to carry out quickly the customer-related activities already planned for	4.037	.7350	16.219	0.000	4	High
47	Hotel Management seeks to respond rapidly to customer-related basic changes	3.977	.7760	14.465	0.000	7	High
48	Hotel Management seeks to respond quickly if anything important takes place insofar as our customers are concerned	4.136	.8260	15.791	0.000	1	High
49	Hotel Management seeks to identify new customer needs and to respond to those needs quickly	4.007	.7760	14.908	0.000	6	High

50	Hotel Management responds swiftly to changes in terms of needs of our customer products or services	4.060	.7690	15.841	0.000	3	High
General Arithmetic mean and standard deviation		4.009	-	0.000	19.268	.6010	High

t- Value Tabulate at level ($\alpha \leq 0.05$) (1.656)

t- Value Tabulate was calculated based on Assumption mean to item that (3)

(4-3): Analysis adequacy of the data to test the study hypotheses

Before test the hypotheses of the study, the researcher conducted some tests in order to ensure the adequacy of the data for the assumptions regression analysis, it was confirmed that there is no high correlation between the independent variables Multicollinearity using the Variance Inflation Factor (VIF) and test Tolerance for each variable of the study variables taking into account the Variance Inflation Factor not to exceed the allowable value (10). And that the Tolerance value greater than (0.05).

Were also ensure that the data follow the normal distribution calculates the skewness coefficient, as the data follow a normal distribution if the value of skewness coefficient is less than (± 1). Table (4-9) shows the results of these tests.

Table (4-9):Results of Variance Inflation Factor, Tolerance and skewness coefficient

No.	Independent Variables	VIF	Tolerance	Skewness
1	Knowledge for Customer	1.570	0.637	-0.393
2	Knowledge from Customer	1.763	0.567	-0.987
3	Knowledge about Customer	1.276	0.784	-0.209

Evident from the results listed in Table (4 - 9) there is no Multicollinearity between the independent variables, confirms that the values of Variance Inflation Factor of the dimensions are (1.570 , 1.763 & 1.276) , respectively, less than (10). As can be seen that the values of Tolerance are (0.637), (0.567) and (0.784) which is greater than (0.05). This is an indication that there is no Multicollinearity between the independent variables

While to make sure that the data follow a normal distribution the researcher calculates the Skewness coefficient where the values were less than (± 1).

(4-4): Study Hypotheses Test

In this section the researcher divided into eight hypotheses, the first six hypothesis testing in multiple regression analysis. The second hypothesis was testing through path analysis.

H₁: There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Marketing Capabilities at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Marketing capabilities. As shown in Table (4-10).

Table (4-10): Multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Marketing Capabilities

[Dependent Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Marketing Capabilities	0.873	0.763	0.757	137.188	3	0.000	Knowledge for Customer	0.768	14.235	0.000
					128		Knowledge from Customer	0.155	2.710	0.008
					131		Knowledge about Customer	0.010	0.214	0.831

Table (4-10) shows the positive effect of Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) on Marketing Capabilities. The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.873) , (0.763), which asserted that (0.763) of the explained variation in Marketing capabilities can be accounted for Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer). On the other hand, Table (4-10) for the executive data set indicated the slope value of (0.768) and (0.155) for the regression line. This suggested that for a one unit increase in Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) can significantly predict a (0.768) and (0.155) increase in

Marketing capabilities. As well as Table (4-10) shows that the analysis of variance of the fitted regression equation is significant with F value of (137.188). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has positive effect on marketing capabilities with a coefficient of (0.768) and (0.155). Thus, Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) actually affected positively on marketing capabilities. This further supported the first hypothesis:

Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has a positive effect on marketing capabilities at level ($\alpha \leq 0.05$).

To ensure the positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on every dimension of Marketing capabilities, the researcher divided the first main hypothesis in to four sub hypotheses, as follows.

H_{1.1}: There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Marketing Research at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Customer Knowledge Management on marketing Research. As shown in Table (4-11).

Table (4-11): Multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Marketing Research

[Dependent Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Marketing Research	0.773	0.597	0.587	63.148	3	0.000	Knowledge for Customer	.7260	10.322	0.000
					128		Knowledge from Customer	.0740	.9940	0.322
					131		Knowledge about Customer	.0000	.0030	0.997

Table (4-11) shows the positive effect of Knowledge for Customer and on Marketing Research. The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.773) , (0.597), which asserted that (0.597) of the explained variation in Marketing Research can be accounted for Knowledge for Customer. On the other hand, Table (4-11) for the executive data set indicated the slope value of (0.726) for the regression line. This suggested that for a one unit increase in Knowledge for Customer can significantly predict a (0.726) increase in Marketing Research. As well as Table (4-11) shows that the analysis of variance of the fitted regression equation is significant with F value of (63.148). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Knowledge for Customer has positive effect on marketing Research with a coefficient of (0.726). Thus, Knowledge for Customer actually affected positively on marketing Research. This further supported the sub-first hypothesis:

Knowledge for Customer has a positive effect on marketing Research at level ($\alpha \leq 0.05$).

H_{1.2}: There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Pricing & Product development at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Pricing & Product development. As shown in Table (4-12).

Table (4-12): Multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Pricing & Product development

[Dependent Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Pricing & Product development	0.696	0.484	0.472	40.008	3	0.000	Knowledge for Customer	0.498	6.259	0.000
					128		Knowledge from Customer	0.223	2.646	0.009
					131		Knowledge about Customer	0.085	1.189	0.237

Table (4-12) shows the positive effect of Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) on Pricing & Product development. The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.696) , (0.484), which asserted that (0.484) of the explained variation in Pricing & Product development can be accounted for Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer). On the other hand, Table (4-12) for the executive data set indicated the slope value of (0.498) and (0.223) for the regression line. This suggested that for a one unit increase in Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) can significantly predict a (0.498) and (0.223) increase in Pricing & Product development. As well as Table (4-12) shows that the analysis of variance of the fitted regression equation is significant with F

value of (40.008). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has positive effect on Pricing & Product development with a coefficient of (0.498) and (0.223). Thus, Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) actually affected positively on Pricing & Product development. This further supported the sub-second hypothesis:

Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has a positive effect on Pricing & Product development at level ($\alpha \leq 0.05$).

H_{1.3}: There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Distribution Channels at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Distribution Channels. As shown in Table (4-13).

Table (4-13): Multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Distribution Channels

[Dependent Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Distribution Channels	0.636	0.405	0.391	29.025	3	0.000	Knowledge for Customer	.5780	6.770	0.000
					128		Knowledge from Customer	.1160	1.286	0.201
					131		Knowledge about Customer	- 0.054	-0. 701	0.485

Table (4-13) shows the positive effect of Knowledge for Customer on Distribution Channels. The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.636) , (0.405), which asserted that (0.405) of the explained variation in Distribution Channels can be accounted for Knowledge for Customer. On the other hand, Table (4-13) for the executive data set indicated the slope value of (0.578) for the regression line. This suggested that for a one unit increase in Knowledge for Customer can significantly predict a (0.578) increase in Distribution Channels. As well as Table (4-13) shows that the analysis of variance of the fitted regression equation is significant with F value of (29.025). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Knowledge for Customer has positive effect on Distribution Channels with a coefficient of (0.578). Thus, Knowledge for Customer actually affected positively on Distribution Channels. This further supported the sub-third hypothesis:

Knowledge for Customer has a positive effect on Distribution Channels at level ($\alpha \leq 0.05$).

H_{1.4}: There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Promotion & Market Management at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Promotion & Market Management. As shown in Table (4-14).

Table (4-14): Multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Promotion & Market Management

[Dependent Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Promotion & Market Management	0.833	0.694	0.686	96.619	3	0.000	Knowledge for Customer	.7180	11.711	0.000
					128		Knowledge from Customer	.1630	2.502	0.014
					131		Knowledge about Customer	.0190	.3460	0.730

Table (4-14) shows the positive effect of Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) on Promotion & Market Management. The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.833) , (0.694), which asserted that (0.694) of the explained variation in Promotion & Market Management can be accounted for Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer). On the other hand, Table (4-14) for the executive data set indicated the slope value of (0.718) and (0.163) for the regression line. This suggested that for a one unit increase in Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) can significantly predict a (0.718) and (0.163) increase in Promotion & Market Management. As well as Table (4-14) shows that the analysis of variance of the fitted regression equation is significant with F value of (96.619). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has positive effect on Promotion & Market Management with a coefficient of (0.718) and (0.163). Thus, Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) actually affected positively on Promotion & Market Management. This further supported the sub-fourth hypothesis:

Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has a positive effect on Promotion & Market Management at level ($\alpha \leq 0.05$).

H₂: There is a significant positive effect of Customer Knowledge Management (Knowledge for Customer, Knowledge from Customer and Knowledge about Customer) on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Customer Agility (Sensing & Responding). As shown in Table (4-15).

Table (4-15): Multiple regression analysis to ensure the positive effect of Customer Knowledge Management on Customer Agility (Sensing & Responding)

Dependent Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Customer Agility (Sensing & Responding)	0.728	0.530	0.519	48.055	3	0.000	Knowledge for Customer	0.591	7.776	0.000
					128		Knowledge from Customer	0.093	1.158	0.249
					131		Knowledge about Customer	0.164	2.402	0.018

Table (4-15) shows the positive effect of Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer) on Customer Agility (Sensing

& Responding). The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.728) , (0.530), which asserted that (0.530) of the explained variation in Customer Agility (Sensing & Responding) can be accounted for Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer). On the other hand, Table (4-15) for the executive data set indicated the slope value of (0.591) and (0.164) for the regression line. This suggested that for a one unit increase in Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer) can significantly predict a (0.591) and (0.164) increase in Customer Agility (Sensing & Responding). As well as Table (4-15) shows that the analysis of variance of the fitted regression equation is significant with F value of (48.055). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer) has positive effect on Customer Agility (Sensing & Responding) with a coefficient of (0.591) and (0.164). Thus, Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer) actually affected positively on Customer Agility (Sensing & Responding). This further supported the main second hypothesis:

Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer) has a positive effect on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).

H₃: There is a significant positive effect of Marketing Capabilities (Marketing Research, Pricing & Product development, Distribution Channels and Promotion & Market Management) on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the multiple regression analysis to ensure the positive effect of Marketing Capabilities on Customer Agility (Sensing & Responding). As shown in Table (4-16).

Table (4-16): Multiple regression analysis to ensure the positive effect of Marketing Capabilities on Customer Agility (Sensing & Responding)

Dependent[Variable	Model Summary			ANOVA			Coefficients			
	(R)	(R ²)	Adjusted (R ²)	F Calculate	DF	Sig*	β		T Calculate	Sig*
Customer Agility (Sensing & Responding)	0.778	0.606	0.594	48.816	4	0.000	Marketing Research	0.120	1.357	0.177
					127		Pricing & Product development	0.217	3.107	0.002
					131		Distribution Channels	0.097	1.210	0.229
					131		Promotion & Market Management	0.460	4.699	0.000

Table (4-16) shows the positive effect of Marketing Capabilities (Pricing & Product development and Promotion & Market Management) on Customer Agility (Sensing & Responding). The regression model achieve a high degree of fit, as reflected by “R” and “R²” value (0.778) , (0.606), which asserted that (0.606) of the explained variation in Customer Agility (Sensing & Responding) can be accounted for Marketing Capabilities (Pricing & Product development and Promotion & Market Management). On the other hand, Table (4-16) for the executive data set indicated the slope value of (0.217) and (0.460) for the regression line. This suggested that for a one unit increase in Marketing Capabilities (Pricing & Product development and Promotion & Market Management) can significantly predict a (0.217) and (0.460) increase in Customer Agility (Sensing & Responding). As well as Table (4-16) shows that the analysis of variance of the fitted regression equation is significant with F value of (48.816). This is an indication that the model is a good one. Since the p-value is less than (0.05), it shows a statistically significant relationship between the variables at (0.95) confidence level.

The results also indicate that Marketing Capabilities (Pricing & Product development and Promotion & Market Management) has positive effect on Customer Agility (Sensing & Responding) with a coefficient of (0.217) and (0.460). Thus, Marketing Capabilities (Pricing & Product development and Promotion & Market Management) actually affected positively on Customer Agility (Sensing & Responding). This further supported the main third hypothesis:

Marketing Capabilities (Pricing & Product development and Promotion & Market Management) has a positive effect on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).

H4: There is a significant positive effect of Customer Knowledge Management on Customer Agility (Sensing & Responding through Marketing Capabilities) at level ($\alpha \leq 0.05$).

To test this hypothesis, the researcher uses the path analysis to ensure the effect of Customer Knowledge Management on Customer Agility (Sensing & Responding) through Marketing Capabilities. As shown in Table (4-17).

From table (4-11) we observe that Marketing Capabilities has a mediating effect between the Customer Knowledge Management and Customer Agility (Sensing & Responding). The **Chi²** was (4.012) at level ($\alpha \leq 0.05$), **Chi²/DF** indicated a good fit model with a value of (2.006). Whereas the **GFI** was (0.984) Goodness of Fit Index approaching to one. On the same side the **CFI** was (0.979) Comparative Fit Index approaching to one, while the **RMSEA** was (0.044) approaching to zero, as Direct impact was (0.844) between Customer Knowledge Management and Marketing Capabilities, (0.241) between Customer Knowledge Management and Customer Agility (Sensing & Responding) (0.560) between Marketing Capabilities and Customer Agility (Sensing & Responding). Also the Indirect impact was (0.172) between social influence on word of mouth through brand image.

Table (4-17): Path analysis test results of the mediating effect of Marketing Capabilities on the relationship between Customer Knowledge Management and Customer Agility (Sensing & Responding)

	Chi ²	Chi ² / df	GFI	CFI	RMS EA	Sig.*	Direct Effect		Indirect Effect	Path	T value	Sig.*
Customer Knowledge Management on Customer Agility through Marketing Capabilities	4.012	2.006	0.984	0.979	0.044	0.000	Customer Knowledge Management on Marketing Capabilities	0.844	0.172*	CKM → MC	17.997	0.000
							Marketing Capabilities on Customer Agility	0.560		MC → CA	5.437	0.000
							Customer Knowledge Management on Customer Agility	0.241		CKM → CA	2.344	0.019

GFI: Goodness of Fit Index must Proximity to One

CFI: Comparative Fit Index must Proximity to One

RMSEA: Root Mean Square Error of Approximation must Proximity to Zero

* Indirect effect is multiplied the values of direct effects to variables

CKM: Customer Knowledge Management

MC: Marketing Capabilities

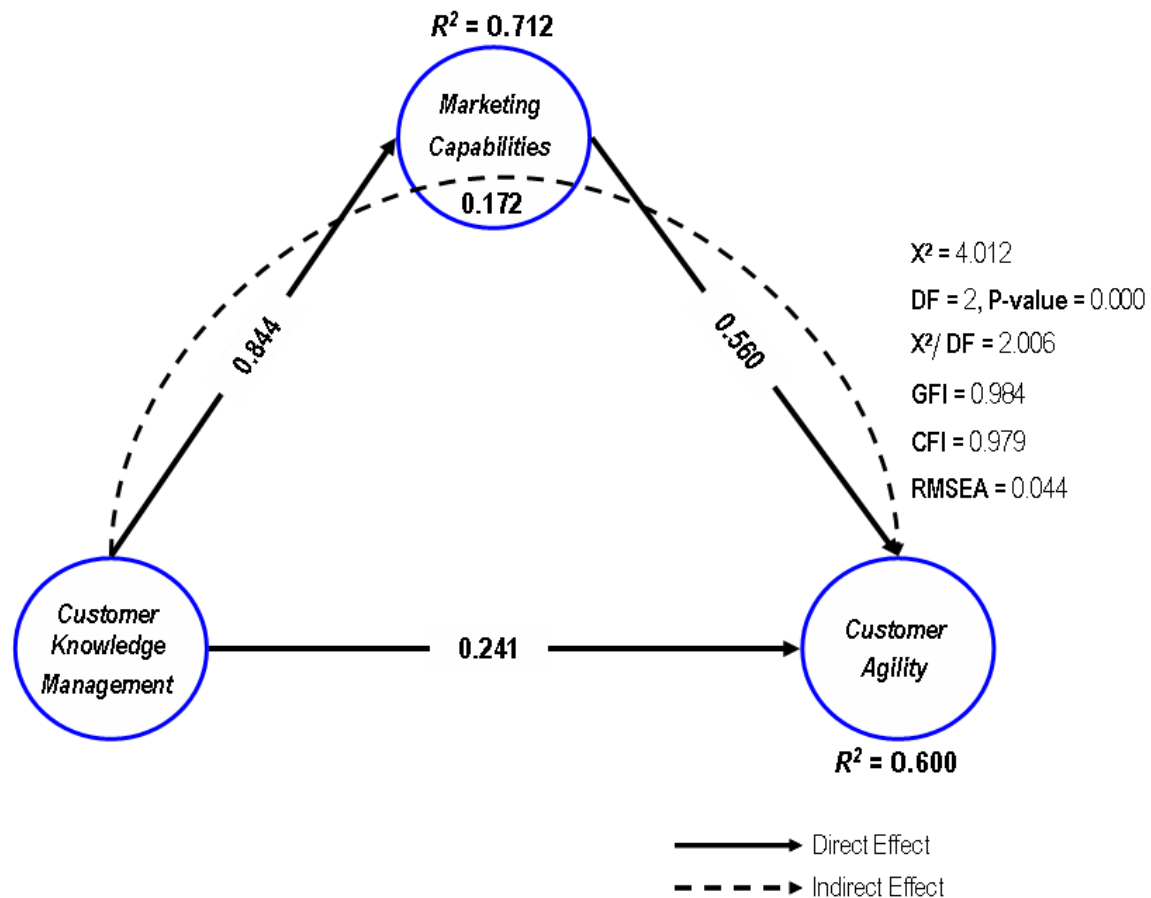
CA: Customer Agility

The **T** value calculated coefficient effect of the first path (Customer Knowledge Management → Marketing Capabilities) (17.997) which is significant at level ($\alpha \leq 0.05$) while the **T** value calculated coefficient effect of the second path (Marketing Capabilities → Customer Agility) (5.437) which is significant at level ($\alpha \leq 0.05$), finally, the **T** value calculated coefficient effect of the third path (Customer Knowledge Management → Customer Agility) (2.344) which is significant at level ($\alpha \leq 0.05$).

The Squared Multiple Correlations (R^2) was (0.712) to marketing capabilities and (0.600) Customer Agility as shown in figure (4 – 1). This result indicates that marketing capabilities has a significant statistical indirect effect between on the relationship between Customer Knowledge Management and Customer Agility. Thus, accepted the main fourth hypothesis that states:

There is a positive indirect significant effect of Marketing Capabilities on the relationship between Customer Knowledge Management and Customer Agility at level ($\alpha \leq 0.05$).

Figure (4 – 1): Standardized effect value for Study Variables



Chapter Five:

Results Discussion and Recommendations

(5-1): Results Discussion and conclusions

(5-2): Recommendations

(5-1): Results Discussion and conclusions

The study appears that the Importance level of Knowledge for customer from the study sample viewpoint was high with general mean amount of (4.064).

The study appears that the Importance level of Knowledge from customer from the study sample viewpoint was high general mean amount of (4.064)

The study appears that the Importance level of Knowledge about customer from the study sample viewpoint was high general mean amount of (4.436).

The study appears that the Importance level of Marketing Research from the study sample viewpoint was high with general mean amount of (3.901).

The study appears that the Importance level of Pricing & Product development from the study sample viewpoint was high with general mean amount of (4.189).

The study appears that the Importance level of Distribution Channels from the study sample viewpoint was high with general mean amount of (3.896).

The study appears that the Importance level of Promotion & Market Management from the study sample viewpoint was high with general mean amount of (3.979).

The study appears that the Importance level of Customer Agility (Sensing & Responding) from the study sample viewpoint was high with general mean amount of (4.009).

The study results show Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has a positive effect on marketing capabilities at level ($\alpha \leq 0.05$). This result consistent with (Taherparvar et al.,2014) study result that indicated that knowledge from customers has a positive impact on both innovation speed and innovation quality as well as on operational and financial performances.

Knowledge for Customer has a positive effect on marketing Research at level ($\alpha \leq 0.05$).

Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has a positive effect on Pricing & Product development at level ($\alpha \leq 0.05$).

Knowledge for Customer has a positive effect on Distribution Channels at level ($\alpha \leq 0.05$).

Customer Knowledge Management (Knowledge for Customer and Knowledge from Customer) has a positive effect on Promotion & Market Management at level ($\alpha \leq 0.05$).

Customer Knowledge Management (Knowledge for Customer and Knowledge about Customer) has a positive effect on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$). This result consistent with (Tabarsa et al., 2014)study result that indicated a positive significant relationship between Customer Knowledge Management and Sensing dimension of Dynamic Capabilities.

Marketing Capabilities (Pricing & Product development and Promotion & Market Management) has a positive effect on Customer Agility (Sensing & Responding) at level ($\alpha \leq 0.05$).

There is a positive indirect significant effect of Marketing Capabilities on the relationship between Customer Knowledge Management and Customer Agility at level ($\alpha \leq 0.05$). This result consistent with (Kamboj et al.,2015) study result indicated that dynamic capabilities increase store performance, and that both knowledge resources and learning mechanisms have a positive effect of knowledge resources on dynamic capabilities which is partially mediated by the type of learning mechanism.

And consistent with (Rostami,2015) study result indicated that there is a positive and significant relationship between marketing capability and innovation.

(5-2): Recommendations

Based on the above results, the study suggests the following recommendations:

- 1- The Five star hotels have to focus on customer knowledge management because they are lead to competitive advantage and superior performance.
- 2- The researcher recommended that five star hotels have to develop marketing capabilities to achieve customer agility.
- 3- The five star hotels should present new ideas that help customer keep pace with the changing environment.
- 4- The five star hotels have to improve their use of marketing capabilities for the purpose of obtaining customer agility.
- 5- The researcher recommends five star hotels in Amman to work hard to stand out among its competitors through improving customer agility in term of using new

method in pricing, distributing, promotion and advanced customer knowledge management system in markets.

- 6- The researcher recommends five star hotels in Amman to continue giving attention to customer agility. since it is one of the most important factors that helps the hotel to achieve the competitive advantage.
- 7- Due to the important effect of customer knowledge management and marketing capabilities on customer agility, the researcher recommends five star hotels in Amman to improve these activities in all its dimensions to enhance customer agility.

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(TRANSLATION FROM ARABIC)

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IN THE NAME OF ALLAH, MOST GRACIOUS MOST MERCIFUL
MIDDLE EAST UNIVERSITY (MEU)
SCIENTIFIC RESEARCH QUESTIONNAIRE

Dear Brother/Sister Respondent,

May God's Peace, Mercy, and Blessings Be Upon You:

The researcher is conducting a scientific study intended to **“Examine the relationship Between the Customer's Knowledge Management and Swift Response to Customer: Mediating Impact of Marketing Capabilities at Five-Star Hotels of Amman”** as part of requirements for obtaining the Master's Degree in Business Administration. So, we present you with the study questionnaire form addressed to Managers and Department Heads working at five-star hotels in the City of Amman.

It is kindly requested to read the items and clauses of the questionnaire, and select the proper responses to all the questionnaire questions according to your own point of view. However, no names need to be mentioned in this study and all information will be used for purposes of scientific research.

Thank you.

Supervisor

Prof/Dr. Prof/Dr. Laith Al Rubaiee

Researcher

Raya Abdul Qader Melhim

Demographic Characteristics of the Study Sample

Gender					
<input type="checkbox"/>		<input type="checkbox"/>	Female¹	<input type="checkbox"/>	Male
Age					
<input type="checkbox"/>	From 40-49	<input type="checkbox"/>	From 30-39 years	<input type="checkbox"/>	Below 30 years of age
<input type="checkbox"/>		<input type="checkbox"/>	60 years and older	<input type="checkbox"/>	From 50-59 years
Educational Qualification					
<input type="checkbox"/>	Bachelor's Degree	<input type="checkbox"/>	Diploma (Community College)	<input type="checkbox"/>	General Secondary Certificate
<input type="checkbox"/>		<input type="checkbox"/>	Doctorate Degree	<input type="checkbox"/>	Master's Degree
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Job Title (Position)					
<input type="checkbox"/>	Department Head	<input type="checkbox"/>	Executive Officer	<input type="checkbox"/>	Director General
<input type="checkbox"/>		<input type="checkbox"/>	Other Job Title (Position)	<input type="checkbox"/>	Department Manager
Number of Years of Service in the Present Job					
<input type="checkbox"/>	11-15 years	<input type="checkbox"/>	6-10 years	<input type="checkbox"/>	5 years or less
<input type="checkbox"/>		<input type="checkbox"/>	21 years and more	<input type="checkbox"/>	16-20 years
Number of Years in Profession					
<input type="checkbox"/>	11-15 years	<input type="checkbox"/>	6-10 years	<input type="checkbox"/>	5 years and less
<input type="checkbox"/>		<input type="checkbox"/>	21 years and more	<input type="checkbox"/>	16-20 years

Please tick the answer which you think is appropriate:

No.	Customer Knowledge Management	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
1.	Hotel can meet customer needs.					
2.	Hotel can answer customer inquiries in a professional manner.					
3.	Hotel can assist in solving customer's problems quickly.					
4.	Hotel has consultants to provide comprehensive training for employees.					
5.	Hotel provides a data base through which employees can easily find the knowledge they need quite rapidly.					
6.	Websites, blogs, and social communications networks are used for disseminating new knowledge to customers.					
7.	Customers are repeatedly informed of new developments related to products/services.					
8.	Hotel tends to store all customer proposals (including complaints) in the data base.					

No.	Customer Knowledge Management	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
9.	Hotel reviews regularly customers' proposals (including complaints) stored in the data base.					
10.	Hotel publishes on its website solutions to repeated problems so that customers will on their own find these solutions.					
11.	The process of collecting data from customers will help us to be diligent in terms of developing new products/services.					
12.	Hotel Management seeks to adjust the new products/services on the basis of customers' comments and remarks.					
13.	The information available about customers helps the Hotel to determine the most important customers.					
14.	Hotel is interested in designing marketing activities which are most appropriate to customers of the highest value (profitability).					
15.	Hotels has designed special marketing activities based on their personal preferences.					

No.	Customer Knowledge Management	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
16.	Hotel compares the statistical data in terms of average success of customer-oriented marketing activities.					
17.	Hotel assigns specialized personnel from the Marketing Department to discuss customers' future needs.					
18.	The technological infrastructure is available for disseminating customer knowledge between departments and subdivisions.					
19.	Customer data base is used to facilitate the tracing process and transparency of customer knowledge.					
No.	Marketing Capabilities	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
20.	Hotel uses its marketing researches as a helpful means of finding more new customers than its competitors.					
21.	Hotel uses its capacities in marketing researches in order to develop effective marketing programs in terms of identifying target customers and their needs along with the proper technology to meet such needs.					
22.	Hotel uses its marketing research information more effectively than its competitors.					
23.	The Marketing Department at the Hotel seeks to develop marketing programs which are better than those of its competitors in terms of identifying target customers and their needs along with the proper technology to meet such needs.					
24.	Hotel is capable of developing products better than those of its competitors.					

25.	Products developed often fall short of attaining objectives.					
26.	Product development imparts on the Company edge in the market.					
27.	Pricing methodology of the Hotel yields major impact on success of marketing programs.					
28.	Pricing methodology is more efficient than those of competitors.					
29.	Hotel is capable of discerning competitor's pricing tactics.					
30.	The distribution system of the Hotels is more efficient than competitors' systems.					
31.	Hotel enjoys better relations with distributors than those of competitors.					
32.	Hotel works more closely with distributors than competitors do.					
33.	Advertising is a vital element of promotional programs for the Hotel.					
34.	Hotels has methods of selling which are more efficient than those of competitors such as using websites of social communication networks.					
35.	Hotel has advertising programs which are more efficient than those of competitors.					
36.	Hotel is capable of dividing the market into sectors which will help the Hotel to compete more effectively.					
37.	Hotel is capable of identifying the target market which will help the hotel to compete more effectively.					
38.	Hotel is capable of managing the marketing programs in an effective manner compared to competitors.					

39.	Hotel has marketing administrative skills which will contribute to realizing a competitive edge.					
40.	Hotel is capable of coordinating between various divisions and departments thereby helping the Hotel to respond to market circumstances quicker than competitors.					
No	Customer Agility	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
41.	Hotel Management always seeks to explore additional customer needs of which they are not aware.					
42.	Hospital Management seeks to anticipate the main trends towards gaining insight into the future needs of current market users.					
43.	Hotel Management always seeks to anticipate customer needs even before customers discern such needs.					
44.	Hotel Management seeks to develop new methods to look into customers and their needs.					
45.	Hotel Management seeks to envisage customer needs even before customers disclose such needs.					
46.	Hotel Management seeks to carry out quickly the customer-related activities already planned for.					
47.	Hotel Management seeks to respond rapidly to customer-related basic changes.					
48.	Hotel Management seeks to respond quickly if anything important takes place insofar as our customers are concerned.					

No	Customer Agility	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
49.	Hotel Management seeks to identify new customer needs and to respond to those needs quickly.					
50.	Hotel Management responds swiftly to changes in terms of needs of our customer products or services.					

MEU جامعة الشرق الأوسط
MIDDLE EAST UNIVERSITY
كلية الأعمال
Faculty of Business

الرقم: د.ع/ح/55/1
التاريخ: 2016/4/6

لنن يهمله الأمر

تحية طيبة وبعد،،

نرجو التكرم من حضرتكم تسهيل مهمة الطالبة "راية عبد القادر ملحم"، بكل ما تحتاجه من معلومات ومساعدة لإتمام رسالة الماجستير الخاصة بيا بعنوان "اختبار العلاقة بين إدارة معرفة الزبون والاستجابة الرشيفة للزبون: الأثر الوسيط لقدرات التسويق بفنادق الخمس نجوم في عمان"، علماً بأن المعلومات التي ستحصل عليها الطالبة ستبقى سرية ولن تستخدم إلا لأغراض البحث العلمي فقط.

وتفضلوا بقبول فائق الاحترام والتقدير،،

د. اسماعيل أحمر
عميد كلية الأعمال

جامعة الشرق الأوسط
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QA

3: Names of Arbitrators

Name	Title	Signature
Prof .Dr. Shafig Al Haddad	Marketing	Princess a University for Technology
Prof.Dr.As'ad Abu Rumman	Marketing	Petra University
Dr.Ahmad Ali Saleh	BUSINESS ADMINISTRATION	Middle East university
Dr, Sima Mqalf	Marketing	Petra University