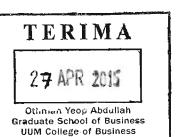
# HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANIZATIONAL PERFORMANCE: THE MEDIATION OF KNOWLEDGE MANAGEMENT AND THE MODERATION OF COMPETITIVE STRATEGIES IN JORDANIAN SERVICE ORGANIZATIONS





Thesis submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
In Fulfillment of the Requirement for the Degree of Doctor of Philosophy



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#### **ABSTRACT**

This study examined the mediating influence of knowledge management on human resource management (HRM) practices and organizational performance (OP), and the moderating role of competitive strategies on the relationship between knowledge management (KM) and organizational performance. Two-hundred and sixty service organizations in Jordan participated in the survey. Multiple regression and hierarchical multiple regressions were used to test the hypotheses. Results indicated that only three dimensions of HRM practices (i.e. staffing, training and development, and job security) had positive influence on OP. Factor analysis revealed three dimensions of KM: technical, cultural, and human. The results further showed that specific HRM practices were significantly associated with different KM dimensions. Performance appraisal had a positive influence on technical KM, while staffing, performance appraisal, and job security were positively associated with cultural KM. Staffing, training and development, and employee participation and involvement were found to enhance human KM. In addition, different dimensions of KM were found to mediate between different types of HRM practices and OP. Technical KM mediated the relationship between staffing, and training and development and OP, while cultural KM mediated the relationship between staffing and job security, and OP. On the other hand, human KM mediated the relationship between staffing, training and development, and job security, and OP. Finally, competitive strategies interacted with human KM in predicting OP. This study offers several recommendations on how to improve the performance of the service sector in Jordan, discusses limitations of the study, and outlines suggestions for future research.

**Keywords:** human resource management practices, knowledge management, competitive strategies, service sector, Jordan

#### **ABSTRAK**

Kajian ini meneliti pengaruh pengantara pengurusan pengetahuan terhadap amalan pengurusan sumber manusia (PSM) dan prestasi organisasi (PO), dan peranan penyederhana strategi kompetitif terhadap hubungan antara pengurusan pengetahuan (PP) dan prestasi organisasi. Sebanyak 260 organisasi perkhidmatan di Jordan mengambil bahagian dalam kaji selidik ini. Kaedah regresi berbilang dan regresi hierarki telah digunakan untuk menguji hipotesis. Keputusan menunjukkan bahawa hanya tiga dimensi amalan PSM (iaitu penstafan, latihan dan pembangunan, dan jaminan kerja) mempunyai pengaruh yang positif terhadapPO. Analisis faktor mendedahkan tiga dimensi PP iaitu teknikal, kebudayaan, dan manusia. Keputusan seterusnya menunjukkan bahawa amalan ASM yang mempunyai kaitan yang signifikan dengan dimensi PP berbeza. Penilaian prestasi mempunyai pengaruh yang positif terhadapPP teknikal, manakala penstafan, penilaian prestasi, dan jaminan kerja mempunyai kaitan yang positif dengan PP budaya. Penstafan, latihan dan pembangunan, serta penyertaan pekerja dan penglibatan didapati dapat meningkatkan PP manusia. Di samping itu, dimensi PP yang berbeza didapati menjadi pengantara antara pelbagai jenis amalan PSM dan PO. PPteknikal mengantara hubungan antara penstafan, dan latihan dan pembangunan sertaPO. Manakala PP budaya mengantara hubungan antara penstafan dan jaminan pekerjaan, dan PO. Sebaliknya, PP manusia mengantara hubungan antara penstafan, latihan dan pembangunan, dan jaminan kerja, dan PO. Akhir sekali, strategi kompetitif berinteraksi dengan PP manusia untuk meramal PO. Kajian ini menawarkan beberapa cadangan tentang cara untuk meningkatkan prestasi sektor perkhidmatan di Jordan, membincangkan batasan kajian, dan menggariskan cadangan untuk kajian masa hadapan.

Kata kunci: amalan pengurusan sumber manusia, pengurusan pengetahuan, strategi kompetitif, sektor perkhidmatan, Jordan

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Daifallah Olaimat 2014

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#### **CHAPTER ONE**

#### INTRODUCTION

# 1.0 BACKGROUND OF STUDY

Today, it is widely recognized that the success and vitality of the service sector are the essential factors in measuring an economy's progress, its quality, and its future (Lee, Ribeiro, Olson, & Roig, 2007). The services sector contributes two third of Jordanian income revenues where its different branches including telecommunications, tourism, health, and education, besides the financial sector, transport and others are considered the largest suppliers to accelerate the economic progress and advancement of the country. In Jordan, the services sector is the main pillar of the national economy by up to three-quarters of the jobs that generated by the economy (Central Bank of Jordan, 2011). Consequently, the monetary value that has been generated from that sector in the national economy income from 2008 to 2012 estimated approximately USD21 billion (Alrai, 2013).

Table 1.1 reveals the Gross Domestic Product (GDP) in the Hashemite Kingdom of Jordan for the periods between 2005 and 2009, while Table 1.2 represents the tabulation a number of employees per sector of the economy. In the agricultural sector, 28900 employees were duly employed in 2005; the figure appreciated to 41391 in 2006, 38922 in 2007, 39809 in 2008, and 40545 in 2009. The agricultural sector was the fifth largest employer of labor in Jordan, with industrial sector in 2009 having 84044 being the number one employer of labor in Jordan. This is followed by the transport and communication with 71774 employees in 2009. Tourism had 40665 employees in 2009

and the least employer of labor is the health sector with only 27370 in 2009. If compared with other sectors, the educational sector was rated to be number three with only 44230 in 2009.

Table 1.1

Gross Domestic Products by Economic Activity in Jordan (million USD) (2005-2009)

2005	2006	2007	2008	2009
247.6	279.9	281.3	281.5	333.2
1271.8	1414.9	1544.6	1623.8	1652.9
61.2	48.6	51.1	45.7	46.9
1143.1	1181.9	1292.3	1367.2	1,462.1
250.4	284.4	327.1	358.1	363.6
9118.1	9997.1	11225.3	11234.3	11425.6
	247.6 1271.8 61.2 1143.1 250.4	247.6 279.9 1271.8 1414.9 61.2 48.6 1143.1 1181.9 250.4 284.4	247.6     279.9     281.3       1271.8     1414.9     1544.6       61.2     48.6     51.1       1143.1     1181.9     1292.3       250.4     284.4     327.1	247.6       279.9       281.3       281.5         1271.8       1414.9       1544.6       1623.8         61.2       48.6       51.1       45.7         1143.1       1181.9       1292.3       1367.2         250.4       284.4       327.1       358.1

Source: Department of Statistics, Jordan (2010).

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Table 1.2
Number of Employees in Various Sectors in Jordan (2005-2009)

		1	,		
	2005	2006	2007	2008	2009
Agriculture	28900	41391	38922	39809	40545
Industrial	66178	73056	88896	82567	84044
Education	37148	38479	43773	43572	44230
Transport and communication	63545	65032	66629	702615	71774
Health	21932	23109	23524	24276	27370
Tourism	29384	31063	34405	38224	40665

Source: Department of Statistics, Jordan (2010).

But despite the importance of the service sector to the national economy in Jordan, it is facing huge challenges on how to deliver quality and superior service to customers as this industry is commonly characterized by mistakes, failures, and customer complaints (Yavas, Karatepe, Babakus, & Avci, 2004). Furthermore, the 2011 Competitiveness Report places Jordan in number 65 of 139 countries, while two years before Jordan was placed at number 48 (Rubalcaba, 2011). This negative evolution of Jordan in the ranking is mainly due to the macroeconomic environment (deficit and debt), labour market regulations, productivity, infrastructure, education, innovation, investor protection, tax regulations and access to finances. Similarly, Wazani (2011) stated that the competitiveness of Jordanian services sector is low and has been strongly decreasing in most service categories between 2006 and 2010, with the notable exception of tourism.

According to Jordan Enterprise Development Corporation (2012), there are several challenges to the Jordanian services sector: Firstly, the services structure in Jordan is not knowledge-oriented. Unlike developed economies, Jordan is currently not oriented towards knowledge-intensive services. The most important are traditional services such as commerce and public services. The 2003-2011 value added growth is concentrated in transport, communications and distributive trades. Business services play a minor role and despite high growth rates in 2003-2010, they still stand poor. Relative shares of business services in Jordan account for less than 5% of the total employment (versus about 14% in developed economies) and about 8% of employment growth (versus about 45% in developed economies). Secondly, the quality is often considered a major or even the major concern of the Jordanian services sector. Services innovation and quality are becoming essential ingredients for business development in developed economies.

However, this is not the main objective of most companies and quality standards need to be upgraded to international levels. There is a lack of service innovation plans, needs for quality standards and needs for better skills. Thirdly, access to finance issues is a major constraint, mainly linked to the difficulties for service organizations to get access to loans and the lack of a guarantee system and funds to back businesses that are based on intangible assets. Fourthly, the regulatory environment is not conducive for the services growth. There are many legal restrictions to business and internationalization, many affecting the development of business services.

Finally, the productivity growth in services sector is very limited. With a few exceptions, such as telecommunications and logistics, most of knowledge-oriented service branches in Jordan had stagnant or negative productivity growth rates between 2004 and 2009. Moreover, the performance of the services sector is measured by weak and below level of ambition and the dissatisfaction with the services sector. Its role in the national economy is the modesty of the volume and value of income generated in the national economy, as well as the low return on investment. Furthermore, the services sector has witnessed declining in the employment growth (Wazani, 2011). The low contribution of the services sector in the Gross Domestic Product (GDP) is due to several reasons, such as, a lack of development of knowledge intensive services, mismatch of skills, and overregulation in the services markets. Moreover, there are reasons related to the political situation in Jordan, where the political situation in the neighboring countries is unstable and experiencing a lot of disputes and conflicts which led to lack individuals' of non-acceptance to provide services importing from Jordan.

Because of the significant contribution of the service sector to the Jordanian economy as a whole, attention should be devoted to further developing and strengthening it. To help policy makers institute relevant policies and business organizations increase their competitive positions, scientific inquiries are needed. Hence, this is what the present study intends to achieve.

#### 1.1 PROBLEM STATEMENT

Studies have found empirical evidence that organizational performance (OP) is partially influenced by human resource management (HRM) practices. In particular, specific HRM practices such as staffing (Koch & McGrath, 1996; Terpstra & Rozell, 1993), compensation (Gerhart & Trevor, 1996; Gomez-Mejia, 1992; Namasivayam, Miao, & Zhao, 2007), training (Aragon-Sanchez, Barba-Aragon, & Sanz-Valle, 2003; Bartel, 1994; Huang, 2001), and performance appraisal (McDonald & Smith, 1995) have been observed to have such influence. However, while these studies have shown the importance of creating value via human resource management practices, they found mixed results on the effect of the practices on organizational performance. While some studies found a positive relationship (Chand & Katou, 2007; Ichniowski et al., 1997; Khan, 2010; King-Kauanui et al., 2006; MacDuffie, 1995, Tsai, 2006), others found a negative one (Rawashdeh & Al-Adwan, 2012). Yet, others found no significant relationship (Abdullah, Ahsan, & Alam, 2009; Al-Qadi, 2012; Boohene & Asuinura, 2011; Lee and Lee, 2007; Lo, Mohamad, & La, 2009, Subramaniam, Shamsudin, & Ibrahim, 2011; Vlachos, 2008). Due to the inconclusive findings, more studies need to be conducted to validate such relationship further.

Secondly, the inconclusive results may also suggest that the effect of HRM practices on OP may not be direct, as some researchers would have assumed. Some asserted that there is a lack of understanding about the fundamental mechanisms through which human resource practices influence organizational performance (Hislop, 2003; Yazhou & Jian, 2012). The literature points out that the link between HRM practices and OP is considered like a 'black box', i.e., there is a lack of clarity regarding 'what exactly leads to what' (Gerhart, 2005). In order to address this, there is a need to develop conceptual and empirical models of HRM practices-OP relationship, which include mediating and moderating variables (Chand & Katou, 2007; Harris, Cortvriend, & Hyde, 2007). Appropriate introduction of a mediating variable can better understand the mechanism between HRM practices and OP. Until now, researchers have considered organizational innovation, occupational safety and health, organizational citizenship behavior, and organizational learning to mediate the relationship (e.g., Al-Damoe et al., 2011; Chan & Mak, 2012; Khasawneh & Alzawahreh, 2012) to make a meaningful exploration on the black box. But there are limited studies on the role of knowledge management in mediating the link. Other researchers (e.g., Har, In, Phaik, & Hsien, 2010) also noted a lack of focus on the study of HRM practices towards knowledge management (KM).

This research argues that factors that drive OP has changed in the knowledge economy. Knowledge has become key in building the core competence of the organization to enable it maintain competitive advantage (Yazhou & Jian, 2012) and hence OP (Jinbo, Xuefeng & Ming, 2011; Yazhou & Jian, 2012). HRM practices play a key role in developing knowledge management. Effective developing and using human

resources have the capabilities for creating, measuring, and reinforcing a knowledge management expectation (Yazhou & Jian, 2012). As a knowledge facilitator, HRM practices create an environment of sharing and using knowledge with a full understanding of the competitive consequences (Yazhou & Jian, 2012). Even though it is argued that HRM practices are able to help organizations discover and utilize knowledge and expertise (Scarbrough, 2003), limited evidence is available to confirm such assertion.

Furthermore, from knowledge management literature, it has been generally revealed that most of the KM-OP studies (e.g., Anantatmula, 2007; Kiessling, Richey, Meng, & Dabic, 2009; Zack, McKeen, & Singh, 2009) have only been carried out in developed countries such as United States, Australia, and European countries. Limited empirical studies have been conducted in developing countries (Daud & Abdul Hamid, 2006; Muhammad et al., 2011), such as, Jordan. Therefore, this study aims to explore the extent of adoption of KM in service organizations in Jordan. This study opens up research opportunities to fill this gap.

According to contingency theory, whether or not an organization is able to accomplish its objectives and goals hinges on the strategy it pursues. To Porter (1985), a competitive strategy allows a firm to create its competitive advantage in relation to its competitors. It is generally accepted that organizational policies and practices should be consistent with the business strategy in the pursuit of organizational effectiveness (Abdullah, Mohamed, Othman, & Uli, 2009). Consistent with this argument, it is expected that competitive strategy will further enhance the effect of knowledge management on organizational performance. But to date, such effect has not been

considered before despite the evidence of knowledge management-performance link (Alalak & Tarabieh, 2011).

According to Porter's (1980) framework, effective competitive strategies can be classified as either cost leadership strategies or differentiation strategies. Each of these strategies implies something different about the potential role of KM practices in improving OP. In the present study, competitive strategy is examined as a moderator because whether or not an organization's performance and effectiveness is achieved depends on the strategic match between its current practices and the strategy it pursues. Organizations that follow cost leadership strategy focus on KM practices that lead to reduced cost components to stay competitive in the price sensitive market segments. On the other hand, organizations that follow differentiation strategy focus on KM practices that lead to enhanced differentiation components of their businesses to stay competitive in their market segments. Finally, organizations that follow innovation strategies focus on innovative aspects of their organizations to stay competitive in their market segments (Al-Alak & Tarabieh, 2011). In sum, examining the theoretical linkages between these variables is important as they could provide an integrated understanding of how the mechanisms and dynamics work in shaping OP.

The present study makes use of resource based view (RBV) along with contingency approach to understand the theoretical links between HRM practices, KM, strategy, and OP. Resource based view theory proposes that a firm's competitive advantage and performance lie on its resources. To develop competitive advantage, firms need to create value that is inimitable by competitors. Even though traditional sources of competitive advantage lead to the creation of value, the argument states this type of

resources such as technology are imitable (Barney, 1991). The latter theory postulates that the relationship among the relevant independent variables and the dependent variable differs at varying levels (Delery & Doty, 1996; Huselid, 1995). In the human resource management literature, competitive strategy is viewed to be the main contingency factor. Thus, to what extent competitive strategy interacts with human resource practices to enhance organizational performance needs to be investigated (Huang, 2001; Youndt, Snell, Dean, & Lepak, 1996).

Literature that examined the relationship between HRM practices and OP have been confined only to western countries in general and USA in particular (e.g., Huselid, 1995; Guest, Michie, Conway, & Sheehan, 2003), with only a few studies conducted in Europe (Boselie, Dietz, & Boon, 2005; Boselie, Paauwe, & Jansen, 2001; Hoque, 1999), in Asia (Bjorkman & Xiucheng, 2002; Huang, 2000; Ngo, Turban, Lau, & Lui, 1998), and Africa (Ghebregiorgis & Karsten, 2007), and least so in the Jordanian context (Khasawneh & Alzawahreh, 2012). The limited number of studies in different contexts other than in USA and Europe calls for researchers to consider further studies on the issue (Altarawneh & Aldehayyat, 2011). This is due to the differences in institutional structures, regulatory environments and cultures, in addition to differences in individual actors among the organizations considered in various studies in different countries (Wright, Gardner, Moynihan, & Allen, 2005). This can be considered an empirical vacuum that needs to be filled.

In addition, the majority of researchers have focused on the manufacturing sector. For example, Arthur (1994) did his study on steel mini-mills in the USA, MacDuffie (1995) on the auto industry in the USA, and Katou and Budhwar (2006, 2007) on the

industrial sector in Greece. Many researchers (e.g., Chand & Katou, 2007; Gerhart, 2005; Harris et al., 2007; Namasivayam et al., 2007; Vlachos, 2008) have called for more research in the services sector. This is because manufacturing and service organizations are different in nature. According to Chuang and Liao (2010), consumption of services is the primary factor that distinguishes service sectors from manufacturing sectors. This is because in the service sectors the consumption of the service happens simultaneously and the services are generally consumed in the presence of the service provider. Furthermore, Jackson and Schuler (1992) argued that unlike the manufacturing sectors, the quality of the services received cannot be immediately examined. Therefore, for the purpose of ensuring quality, the service sectors ought to be meticulous in taking charge of the processes prior to the consumption of the service (Batt, 2002). Moreover, in service sectors, it is crucial to properly deliver the service from the very first time (Bowen & Lawler, 1992).

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# 1.2 RESEARCH QUESTIONS

Based on the gaps identified above, the following research questions are addressed:

- 1. What is the relationship between HRM practices and OP?
- 2. Are HRM practices related to KM?
- 3. Is KM associated with OP?
- 4. Does KM mediate the relationship between HRM practices and OP?
- 5. Do competitive strategies moderate the relationship between KM and OP?

# 1.3 RESEARCH OBJECTIVES

Consistent with the above research questions, the general objective of this study is to investigate the relationship between HRM practices and OP. The specific objectives of this study are:

- 1. To investigate the relationship between HRM practices and OP.
- 2. To determine the relationship between HRM practices and KM.
- 3. To examine the relationship between KM and OP.
- 4. To identify the mediating effect of KM on the relationship between HRM practices and OP.
- 5. To investigate the moderating effect of competitive strategies on the relationship between KM and OP.

# 1.4 SIGNIFICANCE OF STUDY

The present study is considered significant in both theoretical and practical facets. Theoretically speaking, the present study provides evidence on the indirect relationship between HRM practices and OP through KM. Furthermore, this study also sheds some light into the extent of competitive strategies in enhancing OP with the implementation of KM. Considering the fact that the level of a service determines its relative performance, it is presumed that KM mediates the relationship between HMR practices and OP in the service sector. Hence, this study advances an integrated model in which KM mediates the relationship between HRM practices and OP, and competitive strategies moderate the link between KM and OP. By doing so, this study contributes to a better understanding of the relationship between HRM practices, KM, competitive strategies, and OP.

There is a lack of studies related to HRM in the service sector, particularly in Jordan. This study contributes towards the expanding literature in the field of HRM by testing the proposed effects of HRM practices on OP in the context of a developing country, such as Jordan.

From the practical point of view, this study offers practical benefits to practitioners by establishing a standard to be employed by organizations for optimizing their HRM practices to obtain improved performance by applying KM. By testing competitive strategies as moderator, the study provide insight into how KM can be used to further enhance OP, given the implementation of HRM practices. This study also provides useful information to human resource practitioners and academics regarding the adoption of HRM best practices to improve performance.

# 1.5 SCOPE OF STUDY

To meet the research objectives, a survey among managers was conducted in the Jordanian service sector (hotels, universities, hospitals, financial services, communication companies, and transportations) from January to April 2012. The Jordanian service sector was chosen for several apparent reasons: Firstly, the service sector has been envisioned to stay as a strong factor towards economic recovery and growth of Jordan. Secondly, the service sector contributes approximately 65% percent to the Gross Domestic Product (GDP) of the Jordanian economy (Ali et al., 2008). It has been a major player in the growth of this economy in terms of providing employment (Fischer, Khan, Khemani, Mak, & Najmi, 2009). Thirdly, Jordan has not attracted sufficient attention in the

empirical studies of relationship between HRM practices and OP (Altarawneh & Aldehayyat, 2011).

## 1.6 OUTLINE OF THESIS

This thesis consists of six chapters. The first chapter provides background of the study, problem statement, research objectives, research questions, significance of the study, and lastly scope of the study. The second chapter discusses an overview of Jordan. This is to set the context of the study so that readers will be able to locate the study well.

The third chapter presents the current state of the art of the literatures relevant to the study. First, it conceptualizes the main constructs in this study i.e. OP, HRM practices, KM, and competitive strategies. Then, it offers empirical evidence of the theoretical links amongst the concepts. This chapter also discusses resource-based view and contingency theory, which underpin the present study. It also presents the research framework and hypotheses development.

The fourth chapter explains how the present study was practically carried out. In particular, this chapter deals with methodological issues of measurement, sample, research instrument, scale of measurement, data collection method, and statistical testing and analysis.

The fifth chapter is analysis of data and findings of the study. Chapter six discusses the findings of the research in detail in relation to the theories used and past research works. It also highlights implications of the findings, limitations of the study, and recommendations for future research. Some concluding remarks end the thesis.

#### **CHAPTER TWO**

#### CONTEXT OF STUDY

#### 2.0 INTRODUCTION

This chapter presents an overview of Jordan. It then elaborates the service sector in Jordan. Finally, a description of human resource management in the Middle East in general and in Jordan in particular is offered.

#### 2.1 BACKGROUND OF JORDAN

Jordan is an Arab country in the Middle East and has Syria, Iraq, Saudi Arabia and Israel as its neighbors. It entire border lines present a total of 1,619 km with a 26 km coastline on the Dead Sea and the Gulf of Aqaba. The capital of the Hashemite Kingdom of Jordan is Amman.

According to the 2009 census, Jordan population was reported to be 6.3 million with an annual growth rate of approximately 2.5% (MPD, 2010). Islam is the official religion of the country. Almost 92% of the people who live in Jordan are Muslims (MPD, 2010). While Arabic is the national language, English is widely spoken and used in commerce, government, medicine, universities, and education. Both languages are mandatory as medium of instruction in both private and public schools and universities. Jordan is characterized as a country having diverse cultures resulting from the migration of multi-ethnic nations including Armenians and Chechens who have assimilated into the Jordanian society (MPD, 2010).

Since the 1990s, the economy of Jordan has always been stead with tendency towards exports. Being in many agreements with the U.S. and Europe has resulted in an increase in trade. In 2000, Jordan became a member of the World Trade Organization (WTO), which saw an increase in its export of clothing, fertilizers, potash, phosphates, vegetables, and pharmaceuticals to the U.S. (22.4%), Iraq (12.9%), India (8.3%), UAE (7.8%), Saudi Arabia (7.5%), and Syria (4.9%). However, due to the current global economic downturn, the demand for U.S. exports is decreasing, leaving Jordan to look for alternative countries. Iraq is particularly attractive as an alternative destination. The country's real GDP growth rate maintained at around 6% but the government deficit increased at 17.5% of GDP in 2009. The most significant sectors in the same year were services which constituted 65% of GDP.

In general, the economic outlook of Jordan is promising despite the cumulative public debt of 58.3% of GDP in 2008. But with the Jordanian currency, dinar, pegged to the U.S. dollar at 0.709, Jordan was able to control inflation (Central Bank of Jordan, 2009). Moreover, Jordan has been experiencing a constant increase in GDP per capita, since the year 2000. Nevertheless, the actual GDP development has been declining since 2005. The country also experienced a constant increase in unemployment rate, which was officially recorded at 12.6% in 2008 (unofficially reported at 30%). Apart from this, every year 40,000 Jordanians newly enter into the labor market, which has already reached 194,000 unemployed persons (Fischer et al., 2009).

#### 2.2 SERVICE SECTOR IN JORDAN

The service sector in Jordan is regarded one of the most significant sectors which heavily contributes to the Gross Domestic Product (GDP) and as well the manpower employment (Department of Statistics, 2010). According to Department of Statistics (2010), the value added of the Jordanian service sector in 2009 was reported at JD1, 290.5 which was higher by 7.6% from the previous year. Majority of investors from the Middle East consider Jordan as the regional service development repository, which presents a market economy for global and local service providers. This means that Jordan is attracting regional investors who see the potential of the country in providing services for the whole region.

In Jordan many service industries contribute to the Jordanian economy such as tourism, commerce, transport, technology and communication, education, health, financial institutions and other services, which are discussed below.

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## 2.2.1 Tourism

The rapid development of tourism has raised household earnings and government revenues (Brosky, 2007). In 2009, the tourism industry accounted for 10.6% of the GDP. Direct and indirect employment prospects in the tourism sector were estimated at around 130,000 (11% of the work force) (Fischer et al., 2009). Furthermore, in terms of tourism, the total value added in the hotels and restaurants activity was JD302.6 million in 2008, an increase of 7.1%.

As the tourism industry significantly contributes to the Jordanian economy, the Ministry of Tourism and Antiquities has focused on developing a consistent strategy to further

develop the industry (MoTA, 2007). The four-tier approach toward this end is aimed to: (1) enhance tourism marketing (creating demand); (2) facilitate product development (relevant and supporting sectors); (3) create human resources (factor conditions); and (4) offer an efficient institutional and regulating structure (perspective for organizational strategy and competition).

# 2.2.2 Technology and Communication

Knowledge and technological innovation are said to be the main drivers of the growth in the global economy and the development of knowledge economy or the information society (Ministry of Information & Communication Technology, 2010). The importance of the IT industry, by itself, and as a trigger of economic growth overall, has been progressively acknowledged. Based on a report by the Economic Intelligence Unit (2008), the countries which abundantly develop software, hardware, or IT services, contributes up to 47.5% GDP. This knowledge has triggered the combined initiatives at national levels to promote IT sectors, and has led to rapidly developing and ever shifting trends in this field across the globe.

Realizing its potential, the Jordanian government has taken effective measures to be regarded as a prospective destination for offering IT products and services for Jordan and the world. The IT industry has been expanding at a significantly rapid rate and presently accounts for about 5% of the country's GDP (Ministry of Information & Communication Technology, 2010). The total income from the sector increased from USD581 million to over USD770 million between 2005 and 2006, which reflects a growth rate of 32.57%. Moreover, the exports of information technology increased from USD163 million to

USD192 million in the same period, and persisted to account for about 25% of the total revenue. According to the Ministry of Information and Communication Technology (2010), the number of employees in this sector was recorded at 23,600 individuals, which is higher than that in the past few years.

#### 2.2.3 Education

The history of higher education in Jordan can be traced to 1951. This was the year when post-secondary teacher training college was created. In 1962, University of Jordan, the first university in the country, was established. With the government leadership, the higher education sector has since then recorded significant increases in terms of student enrolment and program offerings. In fact until late 1980s, the government owned and subsidized all universities in the country (Turgay & Alhawamdeh, 2013). Currently, there are 10 public and 19 private universities in Jordan, and 51 community colleges. Approximately, student enrolment is 236,000 into both the public and private universities in Jordan, of which 28,000 are foreign students from the neighboring countries and other parts of the world (Turgay & Alhawamdeh, 2013).

The higher education sector has also been earmarked to contribute significantly to the development of Jordan as it enables knowledge creation, scientific research; and sustainability of the local community (Ministry of Higher Education and Scientific Research, 2009). The higher education also allows the country a steady flow of educated, qualified and competent labor force (Ministry of Higher Education and Scientific Research, 2009). The higher education in Jordan has progressively developed across the past two decades, in terms of contents, programs, and strategies of teaching and learning. The contribution of the education sector to the GDP reached 6.15% in 2009. The

education sector also contributes to employment where there were 7,613 lecturers and approximately 17,000 non-academic employees in universities in 2009 (Department of Statistics, 2010). Also the higher education sector is able to attract a big number of international students, suggesting the quality of education it provides. In year, there were around 28,000 international students in various universities across Jordan.

# 2.2.4 Banking

As a result of massive economic liberalization in Jordan, the banking sector has significantly contributes towards the shifting of the country towards a free market trade. In 2009, the labor force in this industry was 15,000 (The Central Bank of Jordan, 2009). The sector has exhibited appealing potentials in terms of development and diversity, and has aggregated 44.6% of total stock market capitalization, and added close to 18.7% of the Jordanian economy2009. The Jordanian government has extensively emphasized the growth of banking institutes, expecting that they will be capable of funding projects and dealing with inbound capital investment.

By the end of 2008, 22 national and five international commercial banks were operating in the country, with a constitutional network of 463 branches (Central Bank of Jordan, 2009). As the financial institutions' significant contribution to the national economy, the government has constituted a number of laws and constitutions for further developing those financial organizations. This attempt has been primarily focused towards enhancing the quality of services provided, improving the capability of organizations to compete within a global market, and motivating financial commitments in the country. Furthermore, the Central Bank of Jordan has liberalized practically all direct control on

interest rates, by implementing financial and commercial free trade. Consequently, Jordanian banks have been exposed to increased foreign competition, and hence, the concern of offering regional competitive banking services has been escalating. Most of the local banks have begun to computerize and modernize their banking services, so as to adjust to their vital role in global financial systems.

#### 2.2.5 Health Care

Among the Middle Eastern nations, Jordan has the most contemporary health care infrastructures. There are public and private health care systems in Jordan. The public sector comprises the Ministry of Health (MOH) and Royal Medical Services (RMS), which are involved in financing and delivering care. Other university-based programs, such as Jordan University Hospital (JUH) in Amman, and King Abdullah Hospital (KAH) in Irbid also offer health care services for the public. The private sector consists of 80 hospitals and several private clinics. Moreover, more than 1.6 million Palestinian refugees in Jordan have access to primary care via the United Nations Relief Works Agency (UNRWA) (Jordan Pharmaceuticals & Healthcare Report, 2012). Every sub-sector of the health care has its own funding and distribution system.

The Ministry of Health (MOH) is the main financier and provider of health care services in Jordan. The MOH oversees all health related issues in Jordan. Due to excellence in health care, Jordan has continually improved its value proposition by meeting quality and international standards. Currently, five Jordanian private hospitals have been recognized by the Joint Commission International (JCI) while five others are still awaiting certification. This guarantees a top quality health care experience to patients,

and illustrates the country's determination in promoting the medical services sector. As such, Jordan has become one of the world's most attractive locations for investment in health care and wellness (Jordan Pharmaceuticals & Healthcare Report, 2012).

The health care sector employs more than 22,000 physicians (Ministry of Health, 2009), of which the majority are certified in the United States, United Kingdom or Germany. There is also an escalating number of skilled nurses with state-of-the-art patient care. Even though lower than the United States, Jordan has the maximum expenses on health as a percentage of its GDP in the MENA region. Most of this investment is made towards improving amenities and equipment, offering top quality medical services to the people, and offering training opportunities for health service professionals (Jordan Pharmaceuticals & Healthcare Report, 2012).

# 2.3 HUMAN RESOURCE MANAGEMENT (HRM) IN THE MIDDLE EAST

Prior to expounding on the section, it is imperative that the word "Middle East,, is explained to better comprehend the national business system and the region's unique culture. "Middle East,, is a term that was pioneered by Alfred Mahan (1840-1914), a renowned American strategist (Rahme, 1999). According to Al-Obaidi (2003), the term encompasses the word 'east' which is considered as the region's location relative to Europe's central location. Based on the World Bank (2004), the Middle East and North African region comprises Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates (UAE), Yemen, and West Bank and Gaza. The present study attempts to shed light on the national business system, culture and business practices of the Middle Eastern

region and particularly the Arab nations. It is imperative to note that Arab countries have common norms and practices owing to their shared historical, religious and socio-cultural characteristics. They also share common literature, architecture, and educational background (Al-Obaidi, 2003).

In the West, HRM is not a new strategy but in the Middle East encompassing Iran in the East and Morocco in the West, the strategy is just beginning to surface (Debrah & Budhwar, 2004). Prior 1980s, Middle Eastern countries, particularly those that are oil producing nations, largely overlooked the private sectors of business requiring skilled human resource department. However, as the governments of these countries began to stress upon manufacturing, agriculture and service sectors, there is a notable shift towards effective human resource laws and departments viewed as the core to economic development. Nevertheless, research concerning the field is still few and far between in the context of the Middle East and what studies exist, they concentrate in economic growth, market forces, policies, laws and regulations (Budhwar, Al-Yahmadi, & Debrah, 2002). But there are studies that tackled the transference of HRM practices of the West to the East. They suggested that for the survival of international firms and for them to thrive, they should react to the requirements of local stockholders and customers first prior to reacting to the needs of their employees.

In light of HRM practices, the Middle East is no different from other developing nations where an inclination exists to stress on sensitivity to local cultural norms and stringent top-down decision making (Debrah & Budhwar, 2004). While varying in degree, all governments are involved in HRM practices at least from a legislative standpoint. They may take either a direct intervention approach or a normative intervention approach

(Mellahi, 2007). The direct, or hard, legal approach the government sets laws and regulation and forces organization to follow them. Such an approach assumes that without such laws firms would use undesirable HRM practices, hence the government will be able to regulate compliance with the laws (Mellahi, 2007). Nevertheless, according to literature, while laws establish sanctions for undesirable behavior, they do not necessarily guarantee the employment of sanctions. Majority of firms utilize the law to justify specific actions, search for loopholes or overlook the law under dire consequences (Godard, 2002). This differs from one country to another and their adherence hinges on many factors. Among these factors is a situation when the law is viewed as a set of moral codes that has to be adhered to and hence the firm may adhere to sanctions or legal codes as it is the responsible thing to do (Godard, 2002).

On the other hand, the normative method involves the government's inducing and encouraging diffusion of the most attractive HRM practices (Mellahi, 2007). This is not carried out with the help of laws and regulations but through the modification of managers' cognitive norms. That is, the government provides firms with guidelines and encouragement to implement these practices in the workplace (Mellahi, 2007). A balanced version of both methods differs from one country to another.

#### 2.4 HRM IN ARAB COUNTRIES

Prior literature regarding HRM exists in Arab nations including Saudi Arabia, Egypt and Oman. It was not until recently when Saudi Arabia attempted to improve its lax policy towards HRM practices. On realizing that the country would not be perpetually producing oil, the need for the other sectors in the country arose (Mellahi, 2007). Up until this

realization, Saudi Arabia's labor law has its basis on a royal decree dated 1969 implying that employers have limited obligations to their employees (local or expatriates) and most of the foreign unskilled workers may be treated in a poor manner not just by the employer but also by the legal system (Mellahi, 2007). Owing to the increasing unemployment, external pressures and the call for a change in direction of business, the government decided to establish new laws to assist in controlling the private sector (Mellahi, 2007).

Current data shows that even though Saudi law has its basis on the Islamic Shari'a Laws, employers are only adopting them after their reinforcement (Mellahi, 2007). Most managers indicate that they would not hesitate to revert back to the old HRM practices if only the government overlooks the enactment and enforcement of new laws (Mellahi, 2007). In other words, this is not consistent with the theory that some firms would employ HRM practices as it is the right thing to do (Mellahi, 2007). This method applied by the Saudi government has led to a work environment where HRM practices are only confined in the private sector as they are mandatory. The core assumptions and styles of these practices have not significantly changed and the new legal system does not openly go against them. The situation calls for effective normative methods and governmental legal regulations or else the HRM policy reforms will only be taking place on the surface without proper implementation (Godard, 2002; Mellahi, 2007).

In the context of Oman, its economy also depends on oil revenues but cuts in oil production resulted in about 26,000 barrels daily and the country's oil production is expected to halt after a little more than 20 years (Ministry of National Economy, 1999). This realization has been a catalyst for diversification of the economy. This diversification has been undertaken through the process of allowing locals to participate in the economy

and participate in the economic growth of the society. Success is only possible with effective HRM practices. It is imperative that the practices Oman should be concentrated on the development of an effective workforce that reinforces government efforts to get involved in a globalized structure that is competitive in regional and international economies (Budhwar et al., 2002).

The Omani government established a development plan called the 'Vision 2020' with the aim to develop Omanis' skills, standards and abilities while protecting their traditions. This is to be carried out by developing human resources through the enhancement of educational level, participation level of women, and the development of tools that would maximize the workforce participation level in the economy (Budhwar et al., 2002). A study Budhwar et al. (2002) concerning employee perceptions of the impact of national culture and national institutions on Omani HRM practices in the year 2002, revealed that, on average, Omanis hold religion as their highest priority (19.22%), followed by the socialization process (15.92%), and the expatriate workforce influence (18.41%). In the survey's open-ended section, 32.3% of the respondents believed that the expatriate factor was believed to have the greatest impact on their organization, while 16% believed it to be religion. This is followed by 12% who thought beliefs, culture, customers and traditions all had the greatest impact. This is significant as these beliefs control the way employees' act and react in the workplace and integrate their behavior to match with a specific group. In addition, 11% of Omanis were of the opinion that organizational culture and company structure has the greatest impact on the organization while 8% believed that being educated abroad has a great impact. When the respondents were inquired regarding the influence of institutional factors including Shari'a law and judicial system, the results were two-pronged. On average, employees gave high priority to the country's civil service laws, educational and vocational training, labor laws, labor market, government programs, local administrative establishments, and regional and international institutions. Less than half of the total respondents believed that this will be a continuing trend. On the other hand, in the open-ended questions of the survey, 42% of respondents were of the opinion that the country's civic service laws will continue to impact HRM policies, practices or the organization as a whole while only 7.1% responded that only Shari'a laws should be utilized in HRM practices (Budhwar et al., 2002).

Egyptians are inclined to hierarchical and controlled structures with structured roles and tasks and that HRM policies and practices require a relationship and team focus with long-term employment (Parnell & Hatem, 1999). Hence, rewards should be based on longevity as well as seniority and under performance-based award, and it should be based on group or relationship. A profile as such would imply that companies would find the most success through their recruitment of employees from within and training for new skills. It is notable that these profile aspects were also revealed to be the ones for majority of developing countries (Leat & El-Kot, 2007). According Leat and El-Kot (2007), developing countries are inclined to be guided by a system that depends on the rationale that human capabilities are confined and structured. A direct outcome includes limited career planning, development with supportive training in the organization. Egyptian workforce is also characterized by respect for seniority, as consistent with the Arab culture. Employees are often in agreement with their supervisors and seeking subordinate's contribution is considered as a weak management strategy. A profile like so, also stresses the significance of relationships over the task and the significance of loyalty

to the group, emphasizing that friendship plays a key role in the Egyptian culture. It also has a significant influence in practices of selection and promotion and nepotism is rampant in the company's structure and policy. There also exists a strong tie to a specific job as employees are often tied to the same job over a great span of years and this may be a factor of an Arab trait for uncertainty avoidance (Leat & El-Kot, 2007).

Leat and El-Kot (2007) further revealed that even though culture stresses the preference for promotion within the organization, managers are still inclined to hire workers based on their skills. However, salaries are more on the basis of job evaluation and not on skills and increases in salary are gauged through job performance as opposed to seniority. Moreover, it is greatly plausible to create a workforce where training in groups and team work are held highly but there also exists a room of materialism and reward which is expected to play a bigger role. The inconsistencies between the actual workplace and people's cultural background are attributed to Western influence in the economy. Companies are urged to be more competitive and hence may be guided by Westernized HRM practices and belief systems (Leat & El-Kot, 2007).

#### 2.5 HRM IN JORDAN

According to Hofstede (1991), HRM practices are conducted within an economic, social, political and legal environment where the need for significant historical and cultural view into local conductions arise in order to comprehend the processes, philosophies and issues of national models of HRM. Human resource management in Jordan is expected to become critical to the way business is carried and eventually business success. Therefore,

to effectively carry out activities, local values, customers and overall external cultural environment cannot be ignored.

Varying reasons have been attributed for the challenges being faced by HRM in the country (Altarawneh & Aldehayyat, 2011). Jordan's socio-cultural diversity has impacted the HRM practices. In addition, Jordan is also known for its over-dependence on culture, language, religion, gender and educational qualifications; factors that are the basis of the employment determination (Altarawneh & Aldehayyat, 2011). In other words, the opportunity for an average Jordanian to be employed is a factor in the variables mentioned. Based on the study by Abu-Doleh and Salhieh (2007), Jordan is among Asian countries that are facing challenges in the form of abundant labor and scarce talent and skills and, hence, the attraction, development, deployment and retention of best talents pose a significant challenge. Abu-Doleh and Salhieh (2007) posited that effective management requirement has been driven by the inclination towards top performance. HRM in Jordan can be described in its infancy stage and considerable studies are needed to fill the gap in literature. They argued that the absence of a comprehensive indigenous and HRM model is the reason why most of the principles and practices in Jordanian workplaces are all taken from other countries. Jordanian HRM practices integrate with Western-inspired methods in light of cultural and institutional impacts. The resulting blend of practices reveals a transplanted and indigenous HRM practices. But HRM in Jordan cannot be completely adopted from other countries owing to its unique socialcultural characteristics, making it an area that calls for further research (Abu-Doleh & Salhieh, 2007).

According to Al-Sabbagh (2008), the sensitivity to individual's socialization along with economic, historical, political and social contexts may allow organization's capitalization on the ability to transplant varying forms of human resource management from one host country culture to other developing countries (e.g. Jordan). However, majority of organizations are known for their lack of research and development into HRM. In Jordan, new technologies aimed at running a cost-effective system are imported to enhance HRM. But because training is lagging, the country still has to employ expatriates (Abu-Doleh & Salhieh, 2007).

Effective employer-employee relations are important for a stable and sustainable development of the Jordanian economy and the overall world economy. Many factors have also impacted HRM practices in Jordan and they include lack of internal manpower to carry out the required tasks, complexity of the business environment attributed to deregulation, globalization, and technological development that go over the companies' level for special projects with limited employees (Abu-Doleh & Salhieh, 2007). Consequently, majority of Jordanian organizations now provide continuous education and training to assist its employees in cultivating skills and in expanding careers within a global/collaborative workplace. Nevertheless, recently, Jordanian workplaces are offering varying human resource strategies adopted from international organizations. For example, significant increase in the contract level or temporary employment and consultant contracting through outsourcing reduces the number of employees in the payroll implying that organizations are paying less for more work without the employees' psychological attachment, commitment, and loyalty (Abu-Doleh & Salhieh, 2007). In Jordan, control is strictly in the hands of management and its role is to manage the employees' number and

tally them with the objectives and goals of the firm. The firms' managements along with the Jordanian government expend efforts to establish structured HRM policies that match with the overall business strategy (Abu-Doleh & Salhieh, 2007).

#### 2.6 SUMMARY

Of late, it is generally acknowledged that the success and vitality of the service sector is a crucial factor in gauging an economic development of a country. As the service sector is taking over the manufacturing sector as the prime driver of economic growth in many developed countries particularly, it is essential to evaluate the performance of this sector. The service sector in Jordan is also no exception. As its significance to the country's development is ever increasing especially when Jordan lacks natural resources, the government focus and emphasis on the service sector is strategically appropriate. From the academic point of view, scientific inquiries are justified and needed by looking at ways to facilitate how this sector could further contribute to the nation's development. Toward this end, the present study seeks to investigate the role of HRM practices in enabling the effectiveness of the service sector. In particular, it aims to examine how HRM practices could enhance KM practices and consequently OP by considering the contingent effect of competitive strategy. In the next chapter, a review of the relevant literature is offered as well as the theories to help explain the postulated links.

#### **CHAPTER THREE**

# LITERATURE REVIEW

#### 3.0 INTRODUCTION

Nowadays continuous performance improvement is of great concern to organizations to survive in the highly competitive environment, characterized by globalization, technical advances, and deregulation (Becker & Gerhart, 1996). The most important and critical resource for achieving the strategic advantage in modern time is HRM (Gray & Herr, 1998). The role of human resource management (HRM) needs to be better understood in achieving better organizational performance (OP). This chapter is organized into six parts to provide discussions on OP, HRM, knowledge management (KM) and competitive strategies. Underlying the present research is resource-based perspective and contingency theory, which are also discussed in this chapter.

#### 3.1 OVERVIEW OF ORGANIZATIONAL PERFORMANCE (OP)

Organizational performance is a complex and multidimensional concept. For example, productivity can be one element of organizational performance, but cannot represent OP by itself (Becker & Huselid, 1998). Studies on the impact of HRM practices on OP have adopted measures or indicators of organizational performance without prior conceptual questioning of what to measure, how measures are defined, and why they are chosen. The questions then become which OP indicators reflecting the impact of HRM practices should be measured and how the OP indicators interact with each other.

In their review of performance measurement, Ford and Schellenberg (1982) identified three approaches to measuring OP. The first one is the goal approach whereby performance is measured by whether the organization is able to achieve its goals, which are ultimate and identifiable. The second perspective is the systems resource approach. This approach emphasizes the relationship between the organization and the environment it belongs to. The organization's ability to secure limited and valued resources determines its performance. The process approach is the third perspective, where performance is defined as the behavior of the participants of the organization.

Consistent with the different perspectives, different indicators i.e. subjective and objective are used to measure OP (Paauwe, 2004). For example, Becker and Huselid (1998) proposed five indicators. They are employee motivation, labor productivity, operational performance, profit and growth, and market value. Dyer and Reeves (1995) used human resource outcomes, organization outcomes, financial accounting outcomes, and capital market outcomes to measure performance. Human resource outcomes involve changes in employees' behavior such as turnover rates, absenteeism rate, and employee satisfaction. In contrast, organizational outcomes were measured by labor productivity, customer satisfaction, and quality of products and services. Three measures were included in the financial accounting outcomes. They were return on assets, return on equity, and profitability. Capital market outcomes had three indicators. These were stock price, stock price growth rate, and market returns.

Three categories of OP were also suggested by Mavrinac, Jones, and Meyer (1995). These include workplace outcomes, customer outcomes, and financial performance. The type of relationship proposed by the authors for the relationship

between HRM and organizational performance is hierarchical. According to their conceptualization, HRM has a direct effect on workplace outcomes and customer outcomes, which influence each other. The employee-customer-profit chain model of Rucci, Kirn, and Quinn (1998) is one of the few models employing balanced organizational performance. Rucci, Kirn, and Quinn argued that the satisfaction of three stakeholders (i.e., employees, customers, and shareholders) can bring business success. Their model suggests that higher employee retention would increase customer retention, which in turn results in higher returns on assets, operating margin, and revenue growth. Although this model does not consider the impacts of HRM, it describes how employees can affect the bottom-line. They carried out an investigation of the model for Sears Corporation in 1995 and reported a five point improvement in employee attitude. This improvement led to a corresponding 1.3 points increase in customer satisfaction, resulting in 0.5% increase in the growth of revenue. Nevertheless, it was impossible to measure the magnitude of these improvements owing to the lack of sufficient information provided by the study on the scale. Additionally, there was also lack of statistical significance level in the study and lack of determination whether there was any direct impact of HRM practices upon OP. Although these limitations exist, employee-customer-profit chain model can still be included to develop a model of the impact of HRM on OP.

Table 3.1 illustrates the wide variety of organizational level outcome variables. As shown in Table 3.1, common operationalization ranges from productivity to elements such as firms market value, operating profits, quality sales growth, and some other established financial measures like return on Assets (ROA), return equity, Gross Rate Return on Assets (GRATE), and Tobin's Q. There are instances where the same variable is

operationalized in various ways by different researchers. For instance, productivity is defined as sales per employee according to Huselid (1995) and it is defined as line uptime by Ichniowski, Shaw, and Prennushi (1997). The most frequently used variable is labor productivity followed by Tobin's Q and Gross Rate Return on Assets (GRATE). The differences that can be observed in OP measures represent a lack of consensus among researchers of what OP really is and how it can be operationalized. Moreover, it also represents a clear disagreement on the sufficient degree of analysis.

Table 3.1

Performance Variables Used in HRM Practices-Organizational Performance Studies

Author / Year	Performance variables
MacDuffie (1995)	Labor productivity, quality
Huselid (1995)	Productivity, Tobin's Q, GRATE
Delery and Doty (1996)	Return on assets, return on equity
Delaney and Huselid (1996)	Organizational and market performance
Ichniowski, Shaw, and Prennushi (1997)	Productivity
Ngo, Turban, Lau, and Lui (1998)	Net profit, satisfaction of employee, retention, development of new product.
Wright, McCormick, Sherman, &	Financial performance
McMahan (1999)	iversiti Utara Malavsia
Hoque (1999)	Productivity, service quality, financial performance
Guthrie (2001)	Productivity, turnover
Guest, Michie, Conway, and Sheehan (2003)	Productivity, labor turnover, profit per employee
Panayotopoulou and Papalexandris (2004)	Growth innovation, financial performance
Stavrou-Costea (2005)	Profitability, productivity, service quality
Cho, Woods, Jang, and Erdem (2006)	Turnover rates, labor productivity, return on assets
Sun, Aryee, and Law (2007)	Productivity, turnover
Som (2008)	Financial performance

The present study incorporates HRM researchers' suggestions to investigate the interrelationships among OP measures. In other words, this study is devoted to investigating the diverse measures of OP that reflect the contributions of HRM practices on organizational success. Secondly, there is considerable debate on which approach is the most appropriate to conceptualizing and measuring OP (Venkatraman & Ramanujam,

1986). Since the present study analyses firms belonging to several sectors, the subjective approach to measuring performance is applied, following the recommendation by Spanos and Lioukas (2001), who suggested that it is better for researchers to use the subjective method to measure performance in studies that are multi-sectorial in nature. This is because subjective measurements of performance have been found to have a strong correlation with objective measurements and are often used as a valid indicator of performance (Wall et al., 2004).

Next, the present study proceeds with an overview of HRM. First, it defines the concept. Then, it continues with a discussion on human resource practices. Previous works on the relationship between human resource practices and organizational performance are then presented.

# 3.2 OVERVIEW OF HUMAN RESOURCE MANAGEMENT (HRM)

# 3.2.1 Definition of Human Resource Management

The notion of human resource management (HRM) was originally developed in the USA in the 1980s (Beer, Spector, Lawrence, & Mills, 1984; Fombrun, Tichy, & Devanna, 1984). Nowadays, not only in the USA but also in most of the developed countries, particularly the UK, this concept has assumed a more distinctive nature, rather than merely being labeled as personnel management (Storey, 1995). There are a number of definitions available of HRM. These definitions are related to each other with common emphasis on the linkage between HRM practices and organizational performance (Miller, 1991).

HRM involves all management decisions and actions that affect the nature of the relationship between the organization and its employees (Beer et al., 1984). The word 'action' is considered important in this definition and has been argued by so many authors that conducting effective HRM practices is defined as managers' responsibility (Armstrong, 1995; Blyton & Turnbull, 1992). According to some scholars (e.g., Lundy & Cowling, 1996; Schuler, Dowling, & De Cieri, 1993), HRM is a set of techniques that enable internal business interventions for the purpose of enhancing quality and improving productivity. Under this approach, the main concerns of control are performance systems (Guest, 1997). Performance management and the tight control over individual activities are ultimately aimed to secure and maintain the competitive advantage of the organization.

Storey (1995) defined HRM from the employment management perspective. He asserted that HRM is an exclusive strategy which attempts to attain competitive advantage by deploying extremely dedicated and qualified employees. For this reason a range of methods has been used. Armstrong (2006) defined HRM as a tactical and consistent strategy that handles the most highly valued resource, i.e. the employees. This definition particularly focuses on both individual and collective contributions of the employees in terms of accomplishing the objectives of the business. HRM is also viewed as an approach where congruency among the various HRM policies and practices is achieved so that the policies and practices are mutually supportive and not conflicting (Milliman, Von Glinow, & Nathan, 1991; Schuler & Jackson, 1987). In the same vein, Wright and McMahan (1992) defined HRM as the pattern of planned human resource deployments and activities intended to enable a firm to achieve its goals.

The above definitions are all concerned with how HRM is designed with activities for the achievement of organizational specific goals. As an example, Boselie et al. (2005) defined HRM as a management strategy that involves management decisions related to policies and practices for the purpose of consolidating the employee relationship. Boselie et al. (2005) described the aim of HRM is the achievement of individual, organizational, and societal goals. Based on the above definitions, the present study conceptualizes HRM as a set of management decisions and actions implemented in a strategic and coherent manner, which relate to the deployment of a highly committed and skilled workforce having optimal relationship with the organization with the aim of securing a competitive advantage.

The above definitions suggest that HRM involves different yet interrelated activities that facilitate organizational performance. The next section deals with these activities or commonly known as human resource practices as a source of competitive advantage.

## 3.2.2 HRM Practices

Wright et al. (2003) defined HRM practices as the organizational activities directed at managing the pool of human capital and ensuring that the capital is employed toward the fulfillment of organizational goals. HRM practices are therefore basically a set of interconnected practices that create an environment that can produce high commitment among employees and encourages them to perform their best, which eventually leads to higher organizational performance.

Generally speaking, HRM practices can be categorized into two: control and commitment practices. The former deals with the norms, supports, rewards, and monitoring of employee behaviors for the purpose of increasing efficiency and output, while the latter deals with increasing effectiveness by depending upon conditions that encourage employees to internalize the goals of the organization and work towards accomplishing those goals (Arthur, 1994; Paauwe & Boselie, 2005). Regardless of the configurations, effective HRM practices stress that implementing a combination of practices that functions as a whole to motivate employees' to contribute toward the accomplishment of organizational goals is imperative (Arthur, 1992; Collins & Smith, 2006). These practices mold employee behaviors and attitudes (job satisfaction and commitment) through the development of psychological relations between the organization and employee aims (Paauwe & Boselie, 2003). Some of the practices that may be adopted for the creation of employment relationship are selective staffing in recruitment and selection of internal and external candidates suitable for the company (Collins & Smith, 2006); comprehensive training and development programs for career growth (Chen & Huang, 2009; Jaw & Liu, 2003); performance appraisal that is developmental in nature where timely feedback for improvement is given (Chen & Huang, 2009); compensation system designed to facilitate knowledge sharing and commitment (Delaney & Huselid, 1996; Delery & Doty, 1996); job security that creates trust, leading to effective cooperation (Pfeffer, 1994); and employee participation and involvement to increase organization performance and decrease negative behavior (Batt, 2002; Chen & Huang, 2009), and minimized conflict (Hodson, 2002).

Although different researchers have studied different sets of HRM practices, most of them agree that certain practices are important in generating high organizational performance. Six dimensions are identified for measuring HRM practices from past studies (e.g., Ahmad & Schroeder, 2003; Delery & Doty, 1996; Fey, Bjorkman, & Pavlovskaya, 2000; Forde, Slater, & Spencer, 2006; Kato & Morishima, 2002; Li, 2004; Pfeffer, 1995). Four of them are categorized as functional dimensions which include staffing, training and development, performance appraisal, and compensation. They are considered to have a great impact on obtaining, motivating, and retaining employees, and they are responsible for improving continual competitive advantage (Pfeffer, 1995). Two additional dimensions, job security, and employee participation and involvement are also chosen for this study based on the support from the literature (e.g., Ahmad & Schroeder, 2003; Delery & Doty, 1996; Fey et al., 2000; Huselid, 1995). Following are the relevant discussions.

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#### **3.2.2.1** Staffing

Staffing practices consist of employment planning and forecasting, recruiting, and selecting employees. One of the most important HRM practices in the service industry is hiring the right person (Crowley, 1999). Staffing is the most critical function among management practices because the quality of an organization's people has a significant impact on long term success (Ulrich, 1997). Hiring the right person in the first place can save much of managers' training effort and time. High retention rates and decrease of turnover rates is also possible by hiring the right people (Crowley, 1999), indicating that

staffing practice can be said to lead to financial success and in turn improve organizational performance (Terpstra & Rozell, 1993).

There are two main sources of identifying prospective candidates: internal or external. The benefits of internal recruiting in the form of horizontal and vertical movement are cost effectiveness, better motivation and morale by rewarding the good work of current employees (Gomez-Mejia, Balkin, & Cardy, 2001). On the other hand, there are several disadvantages of internal recruiting. To start with, it can lead to organization inbreeding, and internal candidates may have limited perspectives on business environment and management skills. It may also cause political infighting for promotions among co-workers (Gomez-Mejia et al., 2001).

External recruitment from outside the company, as an alternative to the internal one, can be considered to be of more advantages by organizations. According to Gomez-Mejia et al. (2001), external recruitment is better in many regards such as the possibility of the candidates bringing new ideas and talent and providing cross industry insights. All these assist the organizations in reducing training costs and meeting equal employment opportunity requirements. However, this is not without its shortcomings as well like the morale problems for internal candidates. This problem arises when a current employee did not get the applied job and became disappointed. As a result, he/she may blame the management for the unsuccessful replacement based on personal sentiments.

#### 3.2.2.2 Training and Development

Training and development was defined by Swanson (1995) as a systematic process through which expertise is developed in an individual mainly for performance

enhancement. In order to improve employees' skills and knowledge for both their current jobs and in preparation for the future job challenges, an organization needs to implement strategic training and development programs. The purpose of employee development is to develop human potential to assist organizations and other individuals to achieve their objectives. Employers must develop their employees' knowledge, skills, attitudes and values in order to realize their full potential. In order for training to be effective, organizations need to identify training needs. Training need assessment is defined as the process of identifying the needs of the organization. Whether or not the organization's needs, objectives and problems can be or addressed by training its employee is the aim of such assessment (Arthur, Bennett, Edens, & Bell, 2003).

Employee development typically involves organizations providing training courses, on their own or through external private providers and also with organizations providing or working in partnership with accrediting institutions to offer programs of study and development (Gibbs & Meginson, 2001). Training and development contributes towards development of collective competencies and organizational learning, by acquiring new skills of employees, training to develop them and organizing them for better career planning, coaching and internal mobility (Guerrero & Barraud-Didier, 2004).

#### 3.2.2.3 Performance Appraisal

Performance appraisal is a process of evaluating employees' job performance against a particular standard, and then communicating that information to those employees (Mathis & Jackson, 2008). Basically performance appraisal has become a more crucial part of a superior tactical strategy in a competitive business environment. According to Latham and

Wexley (1981), performance appraisal is typically seen as having dual purposes: administrative; comprising such action as determining job assignments, raises, promotions and termination; and developmental, consisting of providing feedback, coaching and identifying training needs. However, Cleveland, Murphy, and Williams (1989) identified four usages and applications of performance appraisal. These are (1) between individuals (i.e. for salary administration, promotion, and identifying poor performance); (2) within individuals (i.e. for identifying individual strength and weaknesses, identifying individual training needs, and performance feedback); (3) systems maintenance (i.e. for identifying organizational training needs, evaluating goal achievement, and assisting goal identification); and (4) documentation (i.e. for criteria for validation research, documenting personnel decisions, and meeting legal requirements).

According to Barnard and Rodgers (2000), the primary objective of performance appraisal is employee development i.e. it is a tool to help employees improve their future performance and to identify the skills and experience they will need to acquire to advance within the firm. Human resource practices require performance appraisal to take on a development role where employees are allowed substantial discretion and flexibility. For example, continuous improvement requires employees to discover creative ways to depart from established routines. Since employees have more discretion than traditionally allowed, controlling their performance may be more difficult (Jones, 1984). However, since the economic impact of their performance is greater, control becomes even more important. As a consequence, managers have to spend more time giving feedback, discuss problems and identify areas for improvement, and when this happens employees are likely

to participate more in goal setting and take a future-oriented approach to performance (Snell & Dean, 1992).

## 3.2.2.4 Compensation

According to Darlington (2005), compensation system refers to a framework of paying employee based on their participation and productivity which resulted in successful performance of the organization, and the rewards are normally in the form of pay, commissions, bonuses and other incentives. It is argued that today's organizations treat compensation systems more than a means to secure employment but rather as a means of enhancing organizational performance. In addition to using it to attract, retain and motivate employees, employers should also consider it as a means of implementing strategy to support organizational culture (Balkin & Gomez-Mejia, 1990).

The role played by the compensations system is critical in influencing organizational performance. To deliver high quality services, service industries are especially dependent on HRM. Since human resource practices aid in hiring and retention of quality employees, it has strategic importance. For the achievement of the organization's strategic goal the design and implementation of compensation system is important (Huang, 2000). Pay systems, if designed appropriately, can motivate performance, and help attract and retain employees. It is also considered to be the core element of the relationship between any employer and employee (Wah, 2000).

Regarding the reward systems of an organization, there are several strategic choices to be considered by the management. For one, they must give necessary consideration to the external equity factors in determining rewards. In other words, the

firm must make the strategic decision of payment and other compensations with respect to the competitors. Internal equity should also be an important consideration in designing the compensation systems. Firms striving to ensure equal pay for equal work normally adopt a strong internal equity stance. Other firms may not consider internal equity so important if they decide to determine pay solely on the basis of prevailing market rates. A manager can choose either to customize a reward system or use a standard reward system throughout the organization. Customized system can meet the needs of various employee groups. Either financial or non-financial rewards are possible to provide a form of incentive plans to employees making substantial contributions to organizational effectiveness. As the major part of their reward package, firms may choose either the financial element or the non-financial rewards.

#### 3.2.2.5 Job security

Job security refers to the degree of providing stable employment for the employees by the organization. According to Barnard and Rodgers (2000), effective assurances of employment security are often said to play a critical role in aligning the interests of the employers and employees in a long-term mutual commitment relationship. The common assumption is employees would not actively cooperate in initiatives to increase efficiency because they are afraid that it may result in loss of jobs. Many scholars argued that effective assurances of employment security are particularly important in the context of high involvement work systems (Delery & Doty, 1996; Pfeffer, 1998). Delery and Doty (1996) argued that organizations providing higher degree of job security convey a clear message that the organization has a long-standing commitment to its workforce. This

situation in turn generates more motivation to develop skills and competencies that are valued by their firms. Employees are more likely to deliver productivity improvements if they perceive that their jobs are secure (Zacharatos, Barling, & Iverson, 2005). Pfeffer and Viega (1999) postulated that providing job security is fundamental to a philosophy of putting people first in order to succeed.

Pfeffer (1998) argued that job security is important for a number of reasons. Firstly, employees are unlikely to agree to increase their flexibility and cooperation in becoming more efficient and productive if there is not some assurance that they will not lose their jobs. Secondly, job insecurity provides an opportunity for competitors to recruit the firms' important asset, the workforce, and thirdly, providing job security is a form of discipline for the managers as it encourages considerable caution and care during recruitment and selection process (McKenna & Beech, 2002). In other words, promise of job security is a form of motivation that will result in greater employee commitment and a more productive work environment.

#### 3.2.2.6 Employee Participation and Involvement

Employee participation practice is essentially to enable employees to contribute to decision making and work processes and to give them higher independence and control over job responsibilities and strategy of work (Cappelli & Neumark, 2001). As this practice takes advantage of the specific knowledge employees have about their own work processes and combines the skills and expertise of a group of workers (Cooke, 1994), employees participating in decision making can more effectively harmonize production, and will get rid of hindrance or disruption of production process. Finally, autonomous

employees may be able to diminish waste, inventories and inefficiencies (Cappelli & Neumark, 2001). In a similar vein, Zwick (2004) also maintained that employee participation is important because, firstly, it contributes to personal growth and job satisfaction; secondly, participation will protect employees' interest and thirdly, it promotes organizational efficiency because participation might result in better decision making through enhanced motivation, and it promotes management employee communication.

Employee involvement comes in various dimensions (Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings, 1988). Due to the long-term nature of practices such as Scanlon plans or quality circles, consultative involvement is required. Short-term participation includes brief official participative decision making possibilities about job related problems. Casual participation comprises of subordinates and managers with casual involvement of information sharing. Employee ownership occurs when employees exercise their rights as stockholders, and are able to influence management decision. Representative participation is done by individuals elected by the employees to represent their interests before management. Regardless of the various employee participation schemes available, companies must decide the degree of participation for the employees in different decisions and activities (Cotton et al., 1988).

The above discussion theoretically shows that human resource practices have an important impact on obtaining, motivating, and retaining employees, which are imperative in improving continual competitive advantage of organizations. In the following section, evidence of such link is presented.

# 3.3 EVIDENCE OF RELATIONSHIP BETWEEN HRM PRACTICES AND ORGANIZATIONAL PERFORMANCE

Most research suggests that HRM is vital for an organization to achieve organizational success and secure competitive advantage (Abdalkrim, 2012; Khan, 2010; Lee & Lee, 2007). Previous studies on human resource practices have either been largely conducted in the West (e.g., Ahmed & Schroeder, 2003; Apospori et al., 2008; Fening & Amaria, 2011; Guest et al., 2003; Guthrie, 2001; Ichniowski et al., 1997; Katou, 2008; Katou & Bedhwar, 2006; Tzafrir, 2006; Wright, McCormick, Sherman, & McMahan, 1999) and in the manufacturing sector (Ghebregiorgis & Karsten, 2007; Huang, 2000; Khan, 2010; King-Kauanui et al., 2006; Lo et al., 2009; MacDuffie, 1995). Limited attention was given to the Arabic context especially in Jordan (Alkalha et al., 2012; Rawashdeh & Al-Adwan, 2012) or to the service setting (Abdalkrim, 2012, Boohene & Asuinura, 2011; Chand & Katou, 2007), as shown later.

Empirical evidence generally points out to a positive effect of HRM on OP across different organizations and countries. For instance, Apospori, Nikandrou, Brewster, and Papalexandris (2008), examined the effect of HRM practices on external and internal recruitment, training, performance appraisal, and communication on OP in 21 European countries of 3541 manufacturing and service industries. Organizational performance (productivity, profitability) was found to have a positive influence on human resource practices. In another study, King-Kauanui et al. (2006) examined the relationship between HRM practices (training, performance appraisal, and compensation) and OP in Vietnam and found training, performance appraisal, and compensation positively affected both financial and nonfinancial performance.

However, upon closer examination, empirical evidence indicates that different HRM practices affect OP differently across various organizations and countries, suggesting mixed results. For instance, Fening and Amaria (2011) investigated the impact of HRM practices on the performance of small firms in Florida. This study focused on six practices which include training and development, selection and recruitment, employee participation and decision making, compensation, staff welfare services. Organizational performance was measured by market share, profitability, sales growth, employee morale, customer satisfaction, and quality of product and services. Results indicated significant positive relationships between HRM practices and all dimensions of OP. In another study, Vlachos (2008) examined the effect of HRM practices (selective hiring, self-managed teams and decentralization of decision making, compensation policy, extensive training, job security, and information sharing) on OP in Greece. Self-administered questionnaires were used to collect data from 372 managers. The study found that all human resource practices except job security had significant associations with OP.

Subramaniam et al. (2011) found no significant effect of job security on OP but demonstrated positive effects of compensation, performance appraisal, and training and development on OP in manufacturing companies in Malaysia. In a different study, Lo, Mohamad, and La (2009) did not find any significant effect of training and performance appraisal on organizational performance in Malaysia. Boohene and Asuinura (2011) found recruitment and selection and performance appraisal had a positive relationship with corporate performance, but not rewards and benefits and training and development among service organizations in Ghana. In a study on service organizations in Jordan, Rawashdeh

and Al-Adwan (2012) found a negative effect of training and development on corporate performance.

The mixed findings reported in the literature suggest that the theoretical link between HRM and OP may not be as direct as originally proposed. In this regard, calls have been made to investigate the mechanisms that could possibly link the two in order to help understand how and why HRM influences OP (e.g., AlDamoe et al., 2011; Chan & Mak, 2012; Khasawneh & Alzawahreh, 2012). According to Wright, Gardner, and Moynihan (2003), the relationship between the two is purported to be mediated by some processes or mechanisms that are able to link between two. Indeed, Allen, Shore, and Griffeth (2003) argued that there is a need for a mediating link between HRM practices and OP such as turnover. Similar recommendation was also expressed by Gardner, Moyhihan, Park, and Wright (2001), who noted that previous works tended to neglect the mediating processes especially when the evidence seems to indicate a weak relationship between the two.

As a result of these calls, researchers have considered a number of mediating variables. For example, Sun, Aryee, and Law (2007) considered the role of organizational citizenship behavior on the relationship between HRM practices and OP, while Khasawneh and Alzawahreh (2012) investigated the mediating effect of organizational innovation. Other mediating variables that have been considered include occupational safety and health (Chan & Mak, 2012), employee retention (AlDamoe et al., 2011), and organizational support (Tokmak, Turen, & Gokmen, 2012), to name a few. Expanding the literature on the mediating mechanisms, the present study explores the potential role of

knowledge management (KM) in mediating the link between HRM and organizational performance.

Next, a discussion on KM and its role as a possible mediator is offered. Then, the relationship between HRM practices and KM is discussed. The final section deals with the relationship between KM and OP.

#### 3.4 OVERVIEW OF KNOWLEDGE MANAGEMENT (KM)

# 3.4.1 Definition of Knowledge and Knowledge Management (KM)

Knowledge management has been defined in different ways and from different perspectives. In defining KM, there is a need to look at what knowledge itself is. Furthermore, in defining knowledge, there is a need for defining data and information, which transform into knowledge. According to Buckley and Carter (2002), knowledge plays an important role in an organization because, according to Long (1997), knowledge is a mixture of information and human context that improves the ability to act. To this end, several researchers have defined knowledge and KM concurrently. Among these researchers, Bock and Kim (2002) considered knowledge as what the individual believes in that could help solve organizational problems through synthesis of concepts in both epistemology and psychology. In addition, the authors defined KM as a program that manages and diffuses a set of activities comprising of knowledge-resources acquisition, creation, and sharing for the purpose of OP improvement and obtaining competitive advantages. According to Demarest (1997), knowledge is the actionable information included in the set of work practices, theories-in-action, skills, equipment, processes and

heuristic of firm's employee. To him, knowledge management is the orderly underpinning, observation, instrumentation, and optimization of the firm's knowledge economies.

The above definition reveals that KM may or may not be what KM personnel might do. Nonaka (2007), on the other hand, defined knowledge as a dynamic human process of identifying personal belief toward the truth and referred KM as knowledge conversion activity for knowledge creation. Gold, Malhotra, and Segars (2001) contended that organizations should have two fundamental abilities to manage knowledge: the process and infrastructure. The first one refers to knowledge acquisition, its conversion and its application processes, while the second one deals with the technology, organizational structure, and corporate culture. To help achieve organizational objectives via knowledge management (Zaied, Hussein, & Hassan, 2012), KM infrastructures should be in place. KM infrastructures are the mechanism for the organization to develop its knowledge and also stimulate the creation of knowledge within the organization as well as the sharing and protection of it.

Studies have considered structure, culture, technology, and human knowledge as KM infrastructure capabilities or resources (Agbim, Oriarewo, & Owutuamor, 2013; Chuang, 2004; Gold et al., 2001; Lee & Choi, 2003). Technical knowledge management resource is the KM infrastructure that is essential for initiating and carrying out KM (Chuang, 2004). The technical KM resource includes information technology (IT) assets, which enable a firm to generate new knowledge. In other words, technical KM determines how knowledge travels throughout the enterprise and how knowledge is accessed (Zaied et al., 2012). Structural KM resource such as culture may encourage or inhibit knowledge management (Holsaple & Jushi, 2001; Nonaka, 2007). Human KM resource includes

employees' knowledge of a discipline and how their discipline interacts with other disciplines (Chuang, 2004). Human KM resource is often tacit and dependent on other interpersonal relationships, which may take years to develop and tend to be highly local or organization specific (Lee & Choi, 2003). Cultural KM resource is a range of shared principles, standards and morals, which are primarily possessed by the members of an organization (Chuang, 2004). Organizations that have accumulated these KM resources are able to: (1) integrate the KM and business planning processes more effectively; (2) develop reliable and innovative applications that support the business needs of the firm faster than competitors; and (3) predict future business needs of the firm (Lee & Choi, 2003). According to Johannessen and Olsen (2003), KM resources offer the type of capabilities difficult to imitate.

Based on the various categories of KM, the present study proposes that it can be classified into four categories: structural KM resource, cultural KM resource, technical KM resource, and human KM resource. These four categories enable an organization to develop and sustain its competitive advantage and improve performance. Because knowledge mainly resides on organization's members, the following section discusses how HRM practices shape KM.

#### 3.4.2 Human Resource Management Practices and Knowledge Management

According to Choi (2004), human resource is significantly important owing to the employees being crucial elements of any organization. Thus, human resource has been time and again proven to have a huge impact on OP. For the purpose of achieving an effective KM, human resource must cater to a culture that enhances knowledge sharing. In

other words, human resource is imperative not only to the OP but also to the success of KM. Along the same lines, Milam (2001) opined that organizations generally take up KM for the purpose of retaining expertise, improving customer satisfaction and profits, supporting e-business initiatives, and shortening product development cycles.

The importance of expertise retention is considered the most crucial reason to adopt KM practices. Human capital is the most crucial asset for any kind of organization, and in turn, the organization's success hinges on the ability of management to capture and retain knowledge and skills from its employees for the future. Additionally, KM serves as a competitive advantage and enhances operations in the service industry as well as develops and reuses knowledge through formal and informal procedures and includes this knowledge into various organizational processes. Moreover, duplicate information can be avoided which leads to operational effectiveness (Bouncken, 2002).

Normally organizations utilize the many benefits of KMgement as the main criteria in selecting the most suitable KM system. The most important benefits, according to Anantatmula (2007), are enhanced collaboration, improvement productivity, improved communication, better decision making, and improved employee skills and among these improved employee skills link closely to human resource. Suffice it to say that KM transforms the traditional role of human resource and its view according to the organization. Human resource was formally related to personnel functions, such as recruitment, training, performance appraisal, and compensation. However, currently, the trend has changed to human resource participating in organizational goals and strategy development, making it invaluable to the organization (Anantatmula, 2007). Researchers are of the consensus that human resource will always be linked to collecting and

managing various levels of knowledge, experiences, and expertise as its main purpose is to increase the knowledge assets of the organization and to develop and enhance knowledge capabilities (Anantatmula, 2007; White, 2006). As a result, employees can share knowledge and use the said knowledge to assist them in the organization's daily processes and for specific purposes, saving them from spending much needed time for the information needed (White, 2006).

A number of studies have attempted to identify the association between HRM practices and KM. Among the studies, Tuzuner and Berber (2001) looked into the influence of HRM practices and KM in Turkish firms. HRM practices were measured in terms of training and development, career planning and retention management, staffing, compensation, and performance appraisal. Knowledge management was measured by creation, capture, storage and availability, and utilization. Data were collected from 250 Turkish large sized firms. Results indicated that HRM practices were highly related to KM.

In a similar study, Yahya and Goh (2002) explored the link between HRM practices and KM in 300 Malaysian companies. The study looked particularly into the link between the four dimensions of HRM practices namely training, performance appraisal, compensation, and decision making with the five areas of KM i.e. knowledge acquisition, knowledge application, knowledge creation, knowledge documentation, and knowledge transfer. Results indicated a high association between HRM practices and KM. In another study, Chen and Huang (2009) investigated the relationship between HRM practices and KM in 146 firms in Taiwan. In the study, five HRM practice dimensions were explored comprising training, participation, staffing, compensation, and performance appraisal.

Knowledge management consisted of eight items to measure the extent of the firm's knowledge management ability. They showed that HRM practices were positively related to KM. Firms would achieve a higher level of knowledge management capacity if they hire "premium workers,, invest more in training programs, give employees more opportunities to participate, and reward employees for their contribution in knowledge and expertise.

Despite the increasing literature, according to Edvardsson (2008), the role of HRM in knowledge management is still in its infancy. Other researchers (e.g., Har et al., 2010; Wang, Chiang, & Tung, 2012) also noted the same. Additionally, although literature suggests that HRM can play a key role in KM, only a few empirical research works have explicitly examined the relationship between the two (Jimenez-Jimenez & Sanz-Valle, 2013), as shown above.

Knowledge consists one of the major factors that play a major role in improving OP by providing the organization with more advance techniques that can be used in the organization's activities. To this end the following section will discuss the relationship between KM and OP.

## 3.4.3 Knowledge Management and Organizational Performance

To a majority of organizations, to achieve improved performance does not only depend on the successful distribution of tangible assets and natural resources but it also hinges on the effective knowledge management (Lee & Sukoco, 2007). As a result, investments in KM have been reported as constantly increasing in the past few years (Mills & Smith, 2011). In the present economy, knowledge is the key economic resource and is crucial to

sustaining competitive advantage. In other words, organizations must have the suitable knowledge in the required form and content for the purpose of achieving success (Anantatmula, 2007).

Knowledge management has become invaluable owing to several reasons. To achieve success in the present ever-changing global economy, organizations need to decrease their cycle times comprising production, carry out operations confined to minimum fixed assets and costs, limit product development time, enhance customer service and product quality, increase and improve employee productivity as well as performance, and lastly, update and restructure business processes and maximize agility and flexibility (Gupta, Sharma, & Hsu, 2004). These crucial business activities call for continued efforts to acquire, create, document, share, and apply knowledge by employees as well as teams comprising the entire organizational levels.

Owing to the importance of KM to success, many organizations have made it a habit to largely invest in it. For this reason, majority of studies have tackled the link between KM and OP. For instance, Seleim and Khalil (2007) conducted a study to examine the relationship between KM (acquisition, application, creation, transfer, and documentation) and OP (effectiveness) in Egypt in 30 Egyptian software firms. They showed that all dimensions of KM influenced significantly OP. On a similar note, Zaied et al. (2012) investigated the relationship between KM (structural KM, technical KM, cultural KM, and human KM) and OP in Egypt. Self-administered questionnaires were used to collect data from 302 respondents. The findings indicated a significant influence of KM elements on OP.

In another study, Kharabsheh, Magableh, and Sawadha (2012) examined the relationship between KM practices (communication, knowledge capturing and acquisition, the ability to experiment and create new knowledge, training and competences development, and knowledge management policies) and OP (financial performance, market share, new product success, customer satisfaction, and competitive intensity) in 13 pharmaceutical companies in Jordan. They found a positive and direct relationship between KM practices and OP.

Gholami, Asli, Nazari-Shirkouhi, and Noruzy (2013) examined the influence of KM practices (knowledge sharing, knowledge creation, knowledge storage, knowledge acquisition, and knowledge implementation) on OP (customer satisfaction, productivity, innovation, financial performance, staff performance, and work relationships) in 282 small and medium enterprises in Iran. Results indicated that KM practices directly influence OP. Similarly, Gharakhani and Mousakhani (2012) examined the effect of KM capabilities (knowledge sharing, knowledge application and knowledge acquisition) on organizational performance in Iran. Self-administered questionnaires were used to collect data from 30 small and medium enterprises. The findings indicated that knowledge management capabilities had positive and significant effects on organizational performance. In a recent empirical study, Agbim et al. (2013) examined the impact of KM capabilities (technical KM resource, cultural KM resource, structural KM resource, and human KM resource) on OP (revenue growth, costs, profit margins, cash flow, and operating income) in Nigeria. Self-administered questionnaires were used to collect data from 328 respondents. The results indicated that KM capabilities were positively related to OP.

Despite the evidence showing a positive relationship between KM and OP, the relationship between the two still remains unclear. As organizations seek to stand out from their competitors within the global market environment, they apply different business strategies. Under this condition, to what extent KM enhance OP under different strategic orientations of a company? The following section discusses how competitive strategies can be used to help organizations further enhance their performance in light of their current practices.

#### 3.5 COMPETITIVE STRATEGIES AS A POSSIBLE MODERATOR

#### 3.5.1 Definition of Strategy

Strategy is the most important part of any business management. As described by Snow and Hambrick (1980), strategy is the mechanism that helps organizations align itself with its environment and integrates its internal operations, which in turn, drive performance. Another definition of strategy is given by Thompson, Gamble, and Strickland (2006), who referred to it as the game plan of the management to grow the business, to stake out a market position, to attract and pleasure customers, to compete successfully, to conduct operations, and to achieve targeted objective. Porter (1985) defined competitive strategy as the positioning of a company in its competitive environment.

There are various interpretations and approaches to understanding competitive strategy. However, according to Lenz (1980), there is no single interpretation or approach that can be universally accepted. Despite the lack of consensus, strategic management experts seem to agree what strategic focus of an organization is and how it can be classified (Rue & Holland, 1989). Majority of the researchers (e.g., Rue & Holland, 1989)

agreed that there could be three distinct levels or categories of strategy namely corporate strategy, business strategy (generic or competitive), and functional strategy, as follows:

- Corporate strategy: the type of attempts used by an organization to identify business roles in various sectors (Rue & Holland, 1989).
- 2. Business strategy is concerned with the action and the techniques designed to produce successful performance in a particular type of business. The crucial emphasis of this strategy is to react towards the shifting market conditions and initiate actions for building up market position, developing competing advantage, and establishing strong competitive abilities. Examples include generic strategies of cost leadership, differentiation, and focus strategy (Porter, 1980).
- 3. Functional strategy signifies actions, approaches, and practices employed in managing functions or business processes, or crucial activities within a business. An example of this is a company's marketing strategy and production strategy that would add specifics to business level strategy (Porter, 1980).

Contemporary literature includes several typologies of strategy formulated by past researchers such as Miles and Snow (1978), Porter (1980), and Schuler and Jackson (1987). The next sections discuss the typologies of strategy developed by these scholars.

#### 3.5.2 Porter's Generic Competitive Strategies

Porter is the leading authority on competitive strategy. He is usually known as the father of the contemporary strategy field, and has been recognized as the world's most influential thinker on management and competitiveness (Abdullah et al., 2009). He formulated strategic typology that focuses on two kinds of competitive advantage:

differentiation and cost leadership, which represent "generic strategies,". A third generic strategy is focus. Porter's generic strategies imply different organizational arrangements, control procedures, and incentive systems.

#### 3.5.2.1 Cost Leadership Strategy

The main target of a cost leadership approach is to accomplish low costs as against competitors'. The fundamental concept is to underprice competitors to increase market share and sales, completely throwing out competitors from the market (Porter, 1980). Minimizing costs contributes to lowering prices, which can maximize demand for products or services. This means managers must ensure that the cost of labor, materials, overheads, and other costs remain low, and design a system that can reduce the cost per unit of the product or service. Generally speaking, minimizing costs needs more investment in automated facilities, tools and employees expertise.

Making an attempt to be the low-cost producer in an market could be specifically successful when the market comprises several potential buyers who are cost-sensitive, when there are few approaches to obtain differentiation of product, when customers do not care much about differences from brand to brand, or when there are a huge number of customers with considerable bargaining power (Allen, Helms, Takeda, White, & White, 2006; Porter, 1980).

#### 3.5.2.2 Differentiation Strategy

In differentiation strategy, the main focus is creating a product or service which is unique in an industry. The demand of price flexibility will be reduced since the products or services are exceptional in one or more dimensions. As a result, customers tend to be brand loyal. Differentiation can take many forms: the product itself, the delivery system by which it is sold, and the marketing approach (Prajogo, 2007). Despite the different bases of differentiation, the concern should be to discover ways that lead to a price premium greater than the cost of differentiating. A broad range of other factors can also be the basis of differentiation (Prajogo, 2007). By taking the differentiation strategy, organizations aim to build competitive advantage.

#### 3.5.2.3 Focus Strategy

Focus strategy is another generic strategy used by firms to obtain competitive advantage (Porter, 1980). This strategy rests on the choice of a narrow competitive scope within an industry. The firm first chooses a particular market segment and tailors its strategy to serving them to the exclusion of others. There are two types of focus strategy: (a) in cost focus a firm seeks a cost advantage in its target segment, while in (b) differentiation focus a firm seeks to differentiate its target segment. Cost focus takes advantage of the differences in cost behavior in some segments, while differentiation focus capitalizes on the special needs of buyers in certain segments (Porter, 1980).

#### 3.5.3 Miles and Snow's Competitive Strategies

Miles and Snow (1978) postulated that competing firms within an industry show patterns of behavior representing four basic strategic types with which organizations frame their problems. They described these strategy types as defenders, prospectors, reactors, and analyzers. They argued that organizations in each group demonstrate a consistent structure

of strategic behavior in decisions making when dealing with numerous environmental forces (Connant, Mokwa, & Varadarajan, 1990). McKee, Varadarajan, and Pride (1989) contended that Miles and Snow's (1978) typology "constitutes a continuum of increasing adaptive capability ranging from the reactor (with relatively little adaptive capability) to the prospector (with the highest level of adaptive capability),,. But others contended that the reactor should be excluded from the continuum because it demonstrates that an organization does not have specific unique strategy (Croteau, Raymond, & Bergeron, 1999).

Prospectors are generally externally oriented organizations that pioneer new products and improve innovative techniques (Dess, Lumpkin, &Covin, 1997). They constantly monitor the external environment to be able to rapidly respond to any signs of opportunities and take advantage of being the first entrant (Mitchell, 1991). Hence, they have high marketing and broad technological base. These organizations usually create "change and uncertainty in the marketplace to which competitors are forced to react,, (Stathakolpoulos, 1998, p. 539). As such, their structure is characterized by a low degree of formalization, high degree of decentralization, and lateral as well as vertical communication to enable innovation and flexibility. Their managers are not risk averse and are willing to develop new innovative business, and they do not contemplate trading off effectiveness for development. Keeping the image of an innovator is even more important than obtaining high productivity (McDaniel & Kolari, 1987).

On the contrary, defenders are internally focused organizations. They focus on effectiveness where maintaining a niche with a limited range of products or services is key (Miles & Snow, 1978). Preoccupation with the internal business setting is frequent where

efficiency instead of effectiveness is central (Day & Nedungadi, 1994). As a result of their limited emphasis, they have to modify substantially their technological competence, structure, methods of operation, and devote primary attention to improving the efficiency of existing operations. Although top level managers are experts in their organization's constrained area of operation, they do not look outside their domains for new opportunities. They give more emphasis on the technological aspects of manufacturing, and pay optimum interest towards the net profit. Nevertheless, they also have a narrowed technological platform. The defender organization has a sophisticated conventional structure and high level of centralization. As defenders indulge in risk, they appear to fall behind market competitors in innovation, seeking only confirmed possibilities in their expertise feature. They try to protect their domain by allocating almost all of their resources to controlling and protecting their narrow product markets through lower prices, higher quality, superior delivery and so forth (Croteau et al., 1999).

Analyzers change the features of both, the prospector and defender orientations (Miles & Snow, 1978). They are capable of being efficient when the market is constant and are capable of innovation when the market is dynamic or turbulent. They demonstrate consistent conversation with consumers and generally assess the activities of competitors (Slater & Narver, 1993). Nevertheless, they enter a novel domain after its feasibility has been confirmed by prospectors. They balance risks and returns by following prospectors into new markets and maximizing their technological advancements. They search for versatility along with harmony, and they do this by implementing structures that can accommodate both steady and shifting domains. Routine and efficient operations are characteristic in their stable areas by using formalized structures and processes. However,

in more turbulent areas they look out for new opportunities by assessing their competitors closely for new ideas and then rapidly adopt those that appear to be the most promising.

Lastly, reactor organizations "do not present any consistent pattern of response behavior to environmental conditions,, (Matsuno & Metzer, 2000, p. 4). They just respond to competitive scenario when forced to take action in a usually unreliable and uneven manner. Their behavior is not fixed and their options are customized towards the short term. They neither attempt to remain in a previously obtained product/market domain, nor do they challenge to take advantage on practical environmental opportunities, or take real risks (Croteau et al., 1999). Even though the top managers are frequently aware of change and uncertainty, they are unable to respond effectively. They only make adjustments when forced to do so by environmental pressures. Reactor strategy is generally regarded as fruitful strategy only in highly controlled companies (Snow & Hambrick, 1980).

### 3.5.4 Schuler and Jackson's Competitive Strategies

Schuler and Jackson (1987) proposed three competitive strategies for attaining competitive advantage. They are innovation, cost reduction, and quality enhancement. Innovation strategy is applied to improve products or services to differ from competitors; the most important goal here is offering something new and different. Enhancing the quality of product and service is the supreme goal of quality development strategy. In case of cost reduction strategy, organizations particularly endeavor to become the lowest cost producer. Even though these three competitive strategies could be considered as genuine kinds, employed to individual business units or even single plants or functional areas, still there are chances of overlapping where it is acceptable to find business units, plants, or

functional areas simultaneously focusing on two or more competitive strategies (Schuler & Jackson, 1987).

In the present study, Porter's (1980) strategy is used to conceptualize competitive strategy since that it is academically well accepted and internally consistent (Bayo-Moriones & Lera-López, 2007; Dess & Davis, 1984; Gopalakrishna & Subramanian, 2001; Pertusa-Ortega, Molina-Azorin, & Claver-Cortes, 2009).

#### 3.5.5 Justifying Competitive Strategies as a Potential Moderator

Generally speaking, a moderator acts as either an objective or subjective variable that influences the direction and/or the strength of the relationship between an independent variable or a predictor variable and dependent or criterion variable (Baron & Kenny, 1986). In other words, according to the moderation perspective, its goal is to pinpoint the different effects the independent variable causes on the dependent variable. Baron and Kenny (1986) further summarize the function of the moderator by saying that it addresses the perfect timing when a predictor is strongly related to an outcome.

In the present study, competitive strategy is examined as a moderator because whether or not an organization's performance and effectiveness is achieved depends on the strategic match between its current practices and the strategy it pursues. Organizations that follow cost leadership strategy focus on knowledge management practices that lead to reduced cost components to stay competitive in the price sensitive market segments. Organizations that follow differentiation strategy focus on knowledge management practices that lead to enhanced differentiation components of their businesses to stay competitive in their market segments. Finally, organizations that follow innovation

strategies focus on innovative aspects of their organizations to stay competitive in their market segments.

Several studies have examined competitive strategies as a moderating variable (e.g., Matsuno & Mentzer, 2000; Oltra & Flor, 2010; Song, Benedetto, & Nason, 2007; Spanos & Lioukas, 2001; Sung & Mathews, 2003). For instance, Matsuno and Mentzer (2000) investigated the effects of strategy type upon the relationship between market orientation and organizational performance among 1000 manufacturing U.S firms. Organizational performance was measured by market share, sales growth, and percentage of new product sales to total sales as well as return of investment. Type of strategy was measured in terms of defenders, prospectors and analyzers. They revealed that the strategy type employed by the companies acted as moderator in the relationship between market orientation and organizational performance. The analyzers, in pursuit of a unique combination of the strengths of defenders and prospectors, try to minimize the risk while maximizing profit opportunity. But defenders gain the greatest performance benefit on ROI by increasing market orientation level compared with prospectors and analyzers. However, defenders appear to lose most in market share, sales growth, and percentage of new product sales by increasing the market orientation level. Finally, prospectors benefit from the greatest gain, over both analyzers and defenders, in market share, sales growth, and percentage of new product sales by increasing market orientation level. Judging from the mean comparisons, prospectors are the best performer in every performance measure.

Competitive strategies have also been examined as a moderator on the relationship between operations strategy and organizational performance. For instance, Oltra and Flor's (2010) study involved 76 manufacturing companies specifically dealing with

ceramic tile. A demonstrative moderating effect of competitive strategies was found in the relationship between operations strategy and organizational performance. A positive influence of the cost and quality priorities was found specifically in defender firms but a negative influence was found in priorities of delivery and flexibility. As for operations strategy on organizational performance, no influence was observed in analyzer or prospector firms. In general, the influence of operations strategy on business results presents some similar characteristics in firms with a prospector and analyzer strategy, and differs from the influence on firms with a defender strategy. Hence, in terms of operations, the characterization of analyzers as a combination of defenders and prospectors is qualified since prospectors and analyzers show a more similar behavior. This idea was pointed out by Snow and Hambrick (1980), and also by McDaniel and Kolari (1987), who obtained similar results for both strategy types in their research on the influence of marketing strategy on business performance. When the direct influence of operations strategy on business results was analyzed, of the four competitive priorities, only the cost priority effect was significant. Specifically, it had a negative effect on the firms' economic profitability. In order to lead to success, competencies in other priorities must be developed previously, as the sequential models of competitive priorities suggest.

Song et al. (2007) explored the moderating effect of strategy type on the relationship between capabilities (technology, information technology, market-linking, and marketing capabilities) and financial performance. The sample was made up of 216 firms in USA. Type strategy was measured by analyzers, defenders, reactors, and prospectors. The study revealed that the strategy type acted as a moderator in the relationship between capabilities and financial performance. In other words, there are

significant relationships between capabilities and performance if one does not account for the moderating role of strategic type. When strategic type was used as a moderating variable, the authors found that only certain capabilities had significant effects on profitability. For example, technology and information technology capabilities increase financial performance for prospector organizations; while a different set of capabilities (market- linking and marketing) were positively related to financial performance for defender organizations.

Similar to the above study, Spanos and Lioukas (2001) investigated the relationships between resources and capabilities, competitive strategies and organizational performance among 187 Greek manufacturing industries. They utilized market performance, and profitability to measure organizational performance. Competitive strategies were measured in terms of marketing differentiation, innovative differentiation, and low cost. They revealed that competitive strategies moderated the relationship between resources and market performance via the latter's enhancement of a firm's profitability. Chang and Chen (2002) also conducted a study that explored the moderating role of competitive strategies on the relationship between human resource practices and organizational performance among 197 Taiwanese high-tech firms. The study showed that competitive strategies such as differentiation and cost strategy had moderating effects on the relationship between human resource practices and organizational performance. The moderation role that competitive strategy played in the relationship between human resource practices and organizational performance indicates that competitive strategy influences the relationship between human resource practices and organizational performance, i.e. cost strategy interacting with human resource planning and teamwork to

predict employee productivity and differentiation strategy interacting with training and development, teamwork, and performance appraisal to predict employee productivity. They also found that benefits package significantly decreased employee turnover either given a cost strategy or differentiation strategy. In general, the study suggests that although firms pursue different types of competitive strategy, each of their strategies implies somewhat different human resource practices. Cost strategy tends to focus on internal effectiveness; accordingly, human resource planning and teamwork would be appropriate. On the other hand, differentiation strategy tends to focus on new products/ process development and improvement, thereby training and development, teamwork, and performance appraisal are likely to be appropriate requirements. In a recent empirical study, Seedee (2012) conducted a study that explored the moderating role of business strategies on the relationship between business practices and firm performance in 169 Thai manufacturing firms. Business strategies were measured in terms of cost leadership, differentiation, and focus where nine dimensions were used, namely, strategic planning practice, information and analysis focus practice, human resource practice, leadership practice, process management practice, customer and market focus practice, process innovation, product innovation, and ethics practice. Organizational performance was measured by sales growth, return on investment (ROI), return on equity (ROE), and return on assets (ROA). The study revealed that the business strategies acted as a moderator in the relationship between business practices and firm performance.

In sum, the empirical evidence above shows those competitive strategies play a moderating role in impacting the relationship between independent variable and dependent variable. The next section discusses with the underpinning theory of resource-

based view and contingency theory, which provide the foundation of the theoretical framework.

#### 3.6 UNDERPINNING THEORY

The major purpose of this study was to examine the mediating effect of knowledge management and the moderating effect of competitive strategies on the relationship between human resource practices and organizational performance. Due to the nature of the variables used in this study, two underpinning theories can be suitable to theoretically underlie the framework of this study. The following sub-sections discussed these theories and provided supportive arguments.

## 3.6.1 Resource-based View of the Firm (RBV)

In the strategic management literature, the term of resource-based view of the firm (RBV) is called as the most and fastest growing research areas for the recent decades (Galbreath, 2005). The first breakthrough in the RBV has been accomplished by Wernerfelt (1984) and acquainted with an organization's success, which is predominantly determined by its internal resources. These sorts of resources can be either capabilities or assets. Despite the fact that the assets might be tangible or even intangible (Collis, 1994), the capabilities can be identified as the intangible accumulated skills and knowledge (Teece et al., 1997). According to Barney (1991), the resources of a firm are the capital equipment, employees" knowledge and skills, brand names, and the firm's reputation. Moreover, RBV argues that the resources of the firm are main factors in determining the sustainable competitive advantage (Barney, 1991). In other words, rare, valuable, and inimitable

resources of an organization are the main generators of sustainable competitive advantage and considered as the intangible strategic resources. According to these distinctive resources, the firm can produce the innovative products and get a hold of high quality services, which can lead to high market position. It stands far ahead from its rivals, as it is capable to achieve (Barney, 1991).

Additionally, core competencies RBV stress on the match between the organizational capabilities and the available opportunities. It can explain the failure outcomes of the blind imitation of strategies, which adopted by successful organizations where these strategies are probably not a good match for the available resources. Consequently, the mechanism of RBV is to consider the full use of the available resources for forming the distinctive core competencies towards achieving the sustainable competitive advantage (Makadok, 2001). It has been widely emphasized that there are numerous factors for preventing from being able to achieve the same competitive advantage level of an organization among the competitors. These factors such as internal organizational strategies, human competencies, regulations, access to useful information sources (Barney, 1991). Therefore, an organization can develop its own competencies and establish the match between these internal capabilities and the external environment to achieve the desired competitive strategic position.

Regarding the implications of RBV on an organization's competitive advantage, numerous points can be emphasized. First, since the RBV accentuates strategic choices by a firm's top management to manipulate the relevancy or prominence of resources in creating and sustaining the competitive advantage of the firm. An organization should develop its mechanism to select its distinctive available resources with great potential

value (Makadok, 2001). Second, while the awareness of the internal accompanied by the external environment is significantly emphasized, an organization should look for comprehensive and updated information closely correlated with markets, customers, and competitors, which can design effective plans accordingly (Barney, 1986). Finally, the third implication of RBV on performance is extremely correlated with organizational capabilities. Organizational capabilities are the skilled, talented, experienced humans, information-driven and precise processes that can be fully exploited to generate high quality and innovative outcomes that consistently exceed the customers' expectations (Amit & Schoemaker, 1993). Furthermore, the organizational capabilities can help to coordinate the effective use of the resources and growth the value of the available resources (Wernerfelt, 1984). It has been sturdily emphasized that organizations should not only form their capabilities for creating competitive advantage. Nonetheless, it has heavy duty to ensure that the created competitive advantage is redeveloped and sustained in the course of time. Therefore, the process of forming a competitive advantage must be dynamic for surviving and increasing in the dynamic strategy and hyper-competitive business environment (Teece et al., 1997). Therefore, the strategies of dynamic capability building should be managed by the knowledge accumulation and continuous organizational learning activities (Teece et al., 1997; Ulrich, 1997; Wernerfelt, 1984).

For all intents and purposes, the purpose of this study is to examine the impact of the interaction between, human resource practices, knowledge management, and competitive strategies on the organizational performance. In spite of this, a thorough review of the literature of management shows that the variables used in this study have been theoretically underpinned by the RBV. For example, it has been emphasized that

human resource practices is one of the main sources of competitive advantage (Apospori et al., 2008; Fey & Bjorkman, 2001; Katou, 2008; Vlachos, 2008). Knowledge management also, is considered to be one of the competitive advantage determinants (Emadzade et al., 2012; Kharabsheh et al., 2012). Consequently, previous attempts discussed that the variables of current research could be deliberated as sources of the organizational competitive advantage. This, in turn, justifies the choice of RBV as the underpinning theory to address the issue at hand.

### 3.6.2 Contingency Theory

Contingency theory, which is known as the strategic theory, is primarily concerned with the relationship between a range of possible external contingences and HRM practices (Guest, 1997). According to Guest (1997), there are four important ideas of contingency theory: (1) there is no universal or one best way to manage; (2) the design of an organization and its subsystems must fit with the environment; (3) effective organizations not only have a proper fit with the environment but also between its subsystems; and (4) the needs of an organization are better satisfied when it is properly designed and the management style is appropriate both to the tasks undertaken and the nature of the work group. Within contingency theory research, the main dependent variables commonly examined are efficiency, organizational performance, while the main independent variables are strategy, technology, task, organizational size, structure, and culture (Guthrie, Spell, & Nyamori, 2002). This theory posits that the relationship between the relevant independent variable and the dependent variable will be different for different

levels of the critical contingency variable, mainly, the competitive strategy (Colbert, 2004).

In validating the theory, researchers have examined the interactions between human resource practices, contingency factors, and organizational performance. Industry, size, competitive strategy, and organizational structure are some of the factors purported to influence human resource practices and organizational performance that have been considered (Apospori et al., 2008). The implicit assumption in these models, anchored in the strategy literature, is that the fit between competitive strategy and human resource practices allows organizations to achieve superior performance (Youndt et al., 1996). In other words, the integration of a firm's strategy and its internally consistent pattern of human resource practices form an appropriate employment system. Firms with a differentiation strategy put their emphasis on the firm's recognition of and value towards customer needs. Those adopting a cost leadership strategy focus on their cost structure in competing with other firms in the industry or segmented targets (Colbert, 2004).

There are three main approaches to understanding human resource practices: (1) the universalistic approach that aims to identify human resource practices that can guarantee better organizational performance; (2) the configurational approach that distinguishes between the configurations or unique patterns of factors that are suggested to be extensively effective; and (3) the contingency approach that posits that the relationship between the relevant independent variable and the dependent variable will be different for different levels of the critical contingency variable.

Competitive strategy is considered to be the primary contingency factor in the HRM literature (Katou, 2008). Based on contingency approach, an organization is

responsible for implementing human resource practices that encourage certain employee behaviors that are parallel to the organization's strategy. The compatibility of the organization's strategy and HRM practices would lead to the achievement of superior performance (Guthrie et al., 2002). Understanding the external fit's impact on human resource practices has attracted reasonable research attentions. In summary, contingency theory considers the nature of competitive strategy that could be adopted by a business organization so that the chosen HRM practice can support the competitive business environment. It also works with the assumption that those companies with a well-coordinated business strategy will achieve better organizational performance when its HRM activities are appropriately implemented (Huang, 2001).

#### 3.7 HYPOTHESES DEVELOPMENT

As indicated in the first chapter, the present study aims to examine the predicting role of HRM practices on OP through the effect of KM. The study also intends to assess the moderating role of competitive strategies on the effect of KM on OP. The following hypotheses are formulated towards this end.

# 3.7.1 Relationship between Human Resource Management Practices and Organizational Performance

Many contributors have recorded a positive relationship between HRM practices and organizational performance in service organizations. For example, Abdalkrim (2012) conducted a research in Saudi Arabia to investigate the effect of HRM practices (training and development, performance appraisal, compensation, recruitment and selection, job

rotation, and employee participation) on organizational performance (turnover, profitability, productivity, and job satisfaction) and he found a significant positive relationship between these practices and organizational performance in 125 banks. Alkalha, Al-Zubi, Al-Dmour, Alshurideh, and Masadeh (2012) found a positive influence of HRM practices (training and development, recruitment and selection, performance appraisal, job analysis and design, motivation, employee participation in decision making, and planning) on organizational performance (productivity and profitability). In the same vein, Chand and Katou (2007) found a positive influence of HRM practices (recruitment and selection, job design, manpower planning, extensive training, quality circle, employment security, and compensation,) on OP (profitability, sales growth, productivity, goal achievement, and good services) among 439 respondents working in hotels in India. Nayyab et al. (2011) investigates the effect of HRM practices (selection, job definition, performance appraisal, training, compensation, and employee participation) on OP (marketing department, ability to attain market share, financial performance, quality of products or services) in Pakistan and found a significant positive relationship between these practices and OP.

The theoretical link between HRM practices and OP can be understood from the perspective of resource-based view (RBV). RBV argues that human resource, as one of the organization's main and central resources and assets, could help the organization achieve competitive advantage and subsequently superior long-term performance (Barney, 1991). On the basis of the arguments of the prior studies and the theoretical postulations that effective implementation of each HRM practice leads to OP, the following hypotheses are proposed:

H1a: Staffing is positively related to organizational performance.

H1b: Training and development is positively related to organizational performance.

H1c: Performance appraisal is positively related to organizational performance.

H1d: Compensation is positively related to organizational performance.

H1e: Job security is positively related to organizational performance.

H1f: Employee participation and involvement is positively related to organizational performance.

# 3.7.2 Relationship between Human Resource Practices and Knowledge Management

The resource-based view of the firm suggests that organizations need to incorporate unique, maintainable and superior assets, including sources of knowledge and information, to achieve competitive advantage. Responsibilities of HRM entail how organizations ought to be adapted to encourage knowledge creation and mobilization in order to meet strategic objectives. Human capital is a crucial resource of organizations as they bring with them knowledge, competence and skills to the workplace (Chen & Huang, 2009; Collins & Clark, 2003). Organizations that take advantage of the knowledge and expertise of its employees can create more value and achieve competitive advantage (Scarbrough, 2003). But employees are generally reluctant to share their knowledge and expertise with others owing to self-interests and lack of confidence (Currie & Kerrin, 2003).

According to this notion, it is imperative for organizations to encourage the involvement and participation of employees through knowledge management. Because individuals are characterized as carriers of much of organization-specific knowledge and expertise, organizations can manage this knowledge and expertise through the utilization of HRM practices (Chen & Huang, 2009; Collins & Clark, 2003). Human resource practices like staffing, training, performance appraisal, participation, and compensation, are generally purported to be able to improve commitment, reduce turnover, and increase performance as these practices tend to have developmental and motivational functions (Chen & Huang, 2009; Guthrie, 2001). In addition, organizations can make use of these HRM practices for the provision of skills, resources, and discretion to employees, which are needed to develop knowledge management.

A suitable staffing system can assist the organizations with the selection and allocation of competent and qualified staff to perform the tasks required. Hiring a workforce with certain knowledge and expertise is important for organizations as newly hired employees are more likely to share their knowledge if they are shown the wider viewpoint and taught the suitable attitude (Currie & Kerrin, 2003). Also, it is essential for organizations to hire employees who have the ability to integrate effectively for the purpose of knowledge management development. Selection of workforce with the right expertise and attitude is the key for organizations to incorporate knowledge from different sources and generate innovative and novel ideas (Scarbrough, 2003). Additionally, as employee training is facilitative toward the development of knowledge management, and continuous professional development is specifically crucial to knowledge workers, organizations need to provide comprehensive training opportunities to their employees

(Jaw & Liu, 2003). Exposing the employees to different programs could facilitate them in learning new knowledge and expertise, widening their outlook and encouraging their innovative thoughts and abilities (Nonaka, 2007). Hence, training programs are essential for employees in the knowledge management process (Argote, McEvily, & Reagans, 2003).

The human resource practice of participation may also work to attract employees to contribute and involve themselves in knowledge management and learning activities. Employees who possess skills and expertise and work responsibilities should be given wider autonomy to perform work (Nonaka, 2007), and given more discretion to participate in decision making so that they will be more involved and committed (Glynn, 1996). In other words, employees who are rewarded for presenting their inputs to diversity and enrich existing organizational knowledge and for sharing novel ideas (Andrews & Kacmar, 2001) will help discover and utilize dispersed knowledge and expertise in the organization.

Performance appraisals and compensation are the two significant HRM practices used by organizations to strengthen the behaviors of employees and inspire them to conform to organizational objectives (Collins & Clark, 2003). In cases where organizations desire to receive the desired behavior from employees, performance appraisal must offer feedback and incentives to reinforce such behaviors (Collins & Clark, 2003). But it has been found that employees are less likely to get involved in KM activities, particularly sharing of knowledge, if the objectives determined in their performance contracts is against doing so (Currie & Kerrin, 2003). If organizations create a unified appraisal to relate employees' performance with their involvement in applying

and sharing knowledge at work, then they will be encouraged to work on KM activities. In addition, a compensation scheme should be designed to reward creativity, risk-taking attitude, and problem-solving ability in order to promote diffusion and sharing of knowledge in the organization (Argote et al., 2003; Collins & Clark, 2003). In sum, when implemented well, HRM practices can assist in motivating employees to acquire, share, and apply knowledge within the organization. Suitable HRM practices support and promote the creation of an organizational environment that is open to KM activities.

Although studies on HRM practices and KM are scarce, empirical evidence seems to support the theoretical proposition that HRM practices enhance KM activities. Using a case study approach, Oltra (2005) studied three knowledge-intensive Spanish business units of multinational companies with diverse backgrounds (consultancy firm, railway maintenance services firm, and electrical equipment design, manufacturing and maintenance firm). He was interested in understanding the role of how KM-related HR practices in impacting KM effectiveness. He proposed that six KM-related HR practices (absence of HR-unit contradictions regarding HRM and KM responsibilities, type of work intrinsically demanding of knowledge sharing in the context of a consistent HR system, KM-cent red training actions within overall training planning, formal inclusion of KM duties in job design, productive knowledge sharing measured in performance appraisal, and productive knowledge sharing considered for pay reviews) has a positive impact on KM effectiveness. His finding strongly supports his proposition.

Also in Spain, Jimenez-Jimenez and Sanz-Valle (2013) found strong support for the relation between the adoption of a knowledge-oriented HR system and KM process (i.e. knowledge distribution, interpretation, and acquisition). They considered seven HRM areas (job design, teamwork, staffing, career development, training, performance appraisals and compensation). The study was carried out in 701 firms located in the southeast of Spain with more than fifteen employees. The firms were selected to cover a wide range of industries.

In another study, Minbaeva (2005) found that a higher degree of knowledge transfer occurred when HRM practices were applied as an integrated system of interdependent practices. He concluded that the employment of human resource practices improved the absorptive capacity of knowledge receivers and support organizational learning environment, which led to enhanced knowledge transfer to the subsidiary. The study was conducted in 92 subsidiaries of Danish multinational corporations (MNCs) located in 11 countries.

Thus, based on the theoretical propositions and available empirical evidence, the following hypotheses are offered:

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H2a: Staffing is positively related to knowledge management.

H2b: Training and development is positively related to knowledge management.

H2c: Performance appraisal is positively related to knowledge management.

H2d: Compensation is positively related to knowledge management.

H2e: Job security is positively related to knowledge management.

H2f: Employee participation and involvement is positively related to knowledge management.

# 3.7.3 Relationship between Knowledge Management and Organizational Performance

Guided by resource-based view of the firm, organizations are intentionally adopting KM, expecting to acquire and sustain high levels of OP (Anantatmula, 2007). Jantunen (2005) maintained that knowledge of an organization acts as a strategic asset, assisting the firm in the maintenance of its competitive ability in a fast-paced environment. Knowledge management helps facilitate people to innovate, collaborate and opt for efficient decision. In other words, knowledge management's main goal is propelling people to focus on high-quality knowledge (Du Plessis, 2005).

Knowledge management scholars are of the consensus that effective KMis the root of competitive advantage and enhanced performance (Wong, 2004). But despite its significance, only a few studies have highlighted the relationship between the two (e.g., Anantatmula, 2007; Boumarafi & Jabnoun, 2008; Choi & Lee, 2003; Liu, Chen, & Tsai, 2004; Marques & Simon, 2006; Zack et al., 2009) even though there is evidence that KM is related to OP. For instance, Gold, Malhotra, and Segars (2001) showed that knowledge infrastructure capability had a significant and favorable impact on OP. Data were collected among 323 executives of knowledge management activities within their respective firms in the US. Lee and Sukoco (2007) found that knowledge management capabilities influence creativity and organizational efficiency in Taiwan. Gosh and Scott (2007) also demonstrated that when knowledge infrastructural capabilities such as technology, organizational culture, and organizational structure fit the knowledge process capabilities, significant advancements in effectiveness are obtained. They carried out their study in a large metropolitan area hospital with over 300 beds and over \$350 million in

patient revenues in the US. In evaluating the relationship between knowledge management and performance, Zack, McKeen, and Singh (2009) observed that knowledge management was connected to the dimensions of organizational performance. Other scholars also showed a positive association between KM and OP in the US. As shown earlier, empirical evidence shows that HRM practices were found to enhance KM (e.g., Agbim et al., 2013; Gharakhani & Mousakhani, 2012; Gholami, Asli, Nazari-Shirkouhi, & Noruzy, 2013; Kharabsheh, Magableh, & Sawadha, 2012; Seleim & Khalil, 2007; Zaied et al., 2012).

On the basis of the argument of resource-based view and the empirical evidence, the following hypothesis is offered:

H3: There is a positive relationship between knowledge management and organizational performance.

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# 3.7.4 The Mediating Effect of Knowledge Management

Much research reveals that high commitment HRM practices do not directly impact organizational performance (ALDamoe, Yazam, & Ahmid, 2011; Collins & Smith, 2006; Katou, 2008). This is because the underlying mechanisms by which these practices exert their impact are still not completely known (Hislop, 2003; Fu, 2013). A number of studies have identified the missing link between HRM practices and organization outcomes, reflecting the presence of a black box (Hilsop, 2003; Morrow & McElroy, 2001). The black box model indicates that there is a mysterious tool which is obviously hidden in exploring OP. Knowledge management is known as the essential exercise for getting,

developing, and preserving intellectual capital in organizations (Tan & Nasurdin, 2011). Knowledge management is not only an antecedent of OP but it may also intervene between organizational factors and organizational outcomes. Earlier studies have found the significance of KM as a mediator. For example, Haque and Anwar (2012) found that KM mediated the association between management support and IT infrastructure and OP. Huang and Li (2009) demonstrated that KM mediated the link between social interaction and performance. Moreover, Zheng, Yang, and McLean (2010) showed that KM mediated the association among organizational culture, strategy, structure, and organizational effectiveness.

Organizations can use a set of human resource practices to enhance the level of potential in knowledge management, which practically would enhance employees' capability toward the accomplishment of organizational objectives. In other words, HRM practices do not specifically create organizational performance; instead, they support in augmenting knowledge and skills of employees (e.g., human capital), facilitate group interaction and knowledge and enable organizations to store knowledge in systems, routines, and processes, which consecutively increase OP. Hence, we proposed the following hypothesis:

H4: Knowledge management mediates the relationship between human resource practices and performance.

#### 3.7.5 The Moderating Effect of Competitive Strategies

The main aim of a competitive strategy is to help firms create competitive advantages (Porter, 1985). Competitive strategies such as differentiation and cost have been constantly mentioned in strategic management studies (Spanos & Lioukas, 2001). But whether the difference in competitive strategies lies in the difference with regards to KM is something that needs investigation, as knowledge is a basic factor in the competitive strategy creation. Accordingly, Zack et al. (2009) mentioned that competitive strategy should be considered as a one-of-a-kind knowledge source in order to relate knowledge with strategy. According to Davenport and Prusak (1998), KM should facilitate the combination of competitive strategies which will eventually result in the enablement of KM activity to support and enhance OP. Several researchers (e.g., Davenport & Prusak, 1998; Zack et al., 2009) contended that direct relationships exist between KM and competitive strategy in order to improve the company's opportunities in creating and maintaining competitive advantages.

A moderator variable may play a strong contingent effect to modify the relationship between KM and OP. Competitive strategy can create competitive advantages in the industry in which a firm operates (Porter, 1985). Generic competitive strategies such as differentiation, focus, and cost, have been considered in many strategic management studies (Rivard, Raymond, & Verreault, 2006; Spanos & Lioukas, 2001). According to Huang (2001), the assumption of a close link between competitive strategy and HRM practices are based on contingency theory. This theory holds that HRM practices are selected to be aligned with the type of competitive strategy adopted on the assumption that such coordination will enable companies to achieve better performance

than those that do not. As mentioned earlier, several studies have been competitive strategies as a moderating variable. For example, Matsuno and Mentzer (2000) examined the moderating of strategy type on the relationship between market orientation and OP. They found that strategy type moderated the relationship between market orientation and OP. Chang and Chen (2002) also conducted a study that explored the moderating role of competitive strategies on the relationship between HRM practices and OP. They showed that competitive strategies such as differentiation and cost strategy had moderating effects on the relationship between HRM practices and OP. Even though the moderating effect of competitive strategies has been examined in a few studies (Chang & Chen, 2002; Matsuno & Mentzer, 2000; Song et al., 2007), it is yet to be examined on the relationship between KM and OP. The present study thus attempted to examine the moderating effect of competitive strategies on the relationship between KM and OP. Therefore, the following hypothesis advanced in the present study is as follows:

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H5: Competitive strategies moderate the relationship between knowledge management and

organizational performance.

#### 3.8 THEORETICAL FRAMEWOK

A theoretical framework is defined as a collection of interconnected concepts guiding the research and pinpointing the things that are required to be measured and the relationships that are sought in the data (Borgatti, 1999). Similarly, Nachmias and Nachmias (1996) described a theoretical framework as a representation of reality as it provides a clear

description of the aspects (variables) of the real world which the researcher finds significant to the issue under investigation and it clarifies the significant relation among the aspects. Along a similar line, Borgatti (1999) stated that a theoretical framework is significant as it guides the researcher's observations.

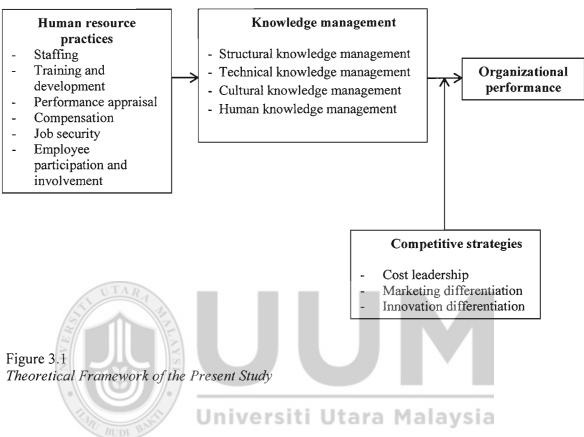
Literatures indicate that HRM practices are keys that affect KM and OP. Human resource practices namely staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement have been shown to influence OP. (e.g., Apospori et al., 2008; Boohene & Asuinura, 2011; Fening & Amaria, 2011; Ghebregiorgis & Karsten, 2007; Guest et al., 2003; Guthrie, 2001; Khan, 2010; King-Kauanui et al., 2006; Lo et al., 2009; MacDuffie, 1995; Nayyab, Hamid, Naseer, & lqbal, 2011). Other studies found the effect of staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement on KM (e.g., Chen & Huang, 2009; Jimenez-Jimenez & Sanz-Valle, 2013; Tuzuner & Berber, 2001; Yahya & Goh, 2002; Yazhou & Jian, 2012). In another group of studies, the literature also reveals that KM influences OP (Boumarafi & Jabnoun, 2008; Daud & Yusuf, 2008; Emadzade, Mashayekhi, & Abdar, 2012; Gholami, Asli, Nazari-Shirkouhi, & Noruzy, 2013; Kharabsheh, Magableh, & Sawadha, 2012; Rasula, Vuksic, & Stemberger, 2012; Seleim & Khalil, 2007; Zaied et al., 2012). Moreover, competitive strategies were also found to influence OP (Al-alak & Tarabieh, 2011; Hashim, 2000; Jusoh & Parnell, 2008; Parnell, O'Regan, & Ghobadian, 2006; Pertusa-Ortega et al., 2009).

A schematic model that demonstrates the relationship among HRM practices, KM, competitive strategies, and OP is presented in Figure 3.1. The figure presents an overview

of the variables to be tested in this study. The independent variable is HRM practices, which purportedly have six dimensions, namely, staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement. The dependent variable of this study is OP. Knowledge management was hypothesized to mediate the relationship between HRM practices and OP, while competitive strategies are hypothesized to moderate the relationship between KM and OP.

The underpinning theory in the present study is the resource based view (RBV), a theory that has been employed by many research studies to examine the human resource practices-organizational performance relationship even across various geographical locations. Majority of the studies in literature concerning the topic found strong support for the use of RBV in various industries (e.g., ALDamoe et al., 2011; Chan & Mak, 2012; Subramaniam et al., 2011). Most authors argue that the theory is strong in explaining the relationship between HRM practices and OP (Apospori et al., 2008; Fey & Bjorkman, 2001; Katou, 2008; Vlachos, 2008). Therefore, RBV is a suitable theory that can be used to explain these relationships in the current study.

The secondary underpinning theory of the present study is contingency theory. Contingency theory posits that the relationship between the relevant independent variable and the dependent variable will be different for different levels of the critical contingency variable. The primary contingency factor in HRM literature is competitive strategy. Thus, according to contingency theory, a firm strategy will interact with HRM practices to result in OP (Delery & Doty, 1996).



#### 3.9 SUMMARY

This chapter discussed the relevant literatures on the influence of HRM practices on OP. Evidence indicates a significant relationship between the two. Due to the limitation of resource-based theory that underpins the present study, KM and competitive strategies are considered to explain how and why HRM practices are purported to enhance OP. This chapter also presented the theoretical framework to be used in the study and how the hypotheses are formulated based on the framework. Research methodology will be discussed in the next chapter.

#### CHAPTER FOUR

#### **METHOD**

#### 4.0 INTRODUCTION

The previous chapter has explored the related literature regarding human resource management, knowledge management, competitive strategies, and organizational performance. It also has discussed the hypotheses to be tested, based on previous studies that have been highlighted earlier and on the relevant theories. In this chapter, the methodological portion of the study is offered. Specifically, this chapter discusses the research design. It also explains in great detail issues regarding sampling and population, measurement of the constructs, data collection procedures, and data analysis techniques. This chapter ends with a summary.

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#### 4.1 RESEARCH DESIGN

According to Oppenheim (1998), the term "research design" can be described as the basic plan or strategy of the research, and the logic behind it which allows for possible and valid results. Similarly, Zikmund (2003) defined it as "a master plan specifying the methods and procedures for collecting and analyzing the needed information" (p. 103). Therefore, research design can be considered as the framework whereby the research is conducted upon. The present study employed a quantitative research method in its attempt to achieve the stated research objectives.

#### 4.1.1 Quantitative Method

A quantitative method is concerned with the measurement of the participants' behavioral and personal characteristics by focusing on the description and measurement of concepts or variables. Through this method, the conceptual approaches to problem solving are explicit and fixed, utilizing measurement tools (Chisnall, 1991). In addition, statistical analyses are normally utilized in order to determine if a certain relationship or difference is significant. In particular, quantitative research methods attempt to find out if a particular hypothesis proves true for the sample, and therefore, for the whole population. The quantitative method is appropriate for the present study due to the following reasons:

- 1. The quantitative method permits the use of standard information and controllable sets of measures. In addition, it permits the testing of similar sets of questions for every respondent and which can be considered as standardized stimuli.
- 2. The quantitative method makes it possible for the survey to be carried out from the sample of the population. In the present study, the survey was conducted on general managers working in service organizations. In being representative, the sample sizes allow for generalization.
- This particular method makes it possible to test the relationships that exist between variables.
- 4. This method allows the researcher some degree of control over whom and what to measure without having to interfere with the natural setting of the subjects under investigation.
- 5. The method satisfies cost, technical, and time considerations based on the types of information availability of resources (Sproull, 2002).

#### 4.1.2 The Chosen Research Design

For the purpose of this research, a cross-sectional field study assisted by survey questionnaire was the most appropriate process owing to the fact that it is basically a study involving social process (Babbie, 2007). In a cross-sectional study, the entire variables for all cases are measured within a narrow time from for the purpose of contemporaneous viewing. In other words, data was collected an only one point from different participants in different organizations. It was appropriate that a cross-sectional method should be carried out as the researcher desired to determine the perceptions of the participants of the HRM practices carried out in their organization, as well as their knowledge of their organizations.

## 4.1.3 Unit of Analysis

It is important for researchers to explain the unit of analysis they employed in their study to determine the solution to the problem identified (Sekaran & Bougie, 2010; Zikmund et al., 2010). The unit of analysis is described as the level of data aggregation to be gathered in the phase of data analysis. It is employed by the researcher to measure the variables (Sekaran, 2003). The unit of analysis may be at the individual, group, business unit, or organizational level. Because the study was interested in looking into the effect of human resource practices on knowledge management, competitive strategies, and organizational performance, the unit of analysis was represented by the organizational level. To be able to get the perception of "the organization,", opinions of general managers of the organization were considered to represent the opinion of the organization.

# 4.2 POPULATION, SAMPLE, AND SAMPLING TECHNIQUE

This section explains the population, sample, and the sampling technique. Specifically, it talks about what the population of the study is, and how the sample was selected. It explains in detail the sampling technique used to select the sample to represent the population identified.

### 4.2.1 Population

According to Sekaran (2003, p. 265), population is considered as the "entire group of people, events, or things of interests that the researcher wishes to investigate,. In the same vein, Cooper and Schindler (2008) defined population as those people, events, or records that contain the desired information and can answer the measurement questions. In the present study, the population consists of all service organizations in Jordan such as hospitals, hotels, universities, transportation, communications, and financial services. At the point of this study, there are 422 service organizations in Jordan (Department of Statistics, 2010).

# 4.2.2 Sample Size

Sample size can be defined as the subset of a population required to ensure significant results (Sekaran & Bougie, 2010). The sample size refers to the number of units required to obtain accurate findings (Fink, 2002). Sampling is usually preferred instead of data collection from every element of the population because of the former's practicality (Sekaran, 2003; Zikmund, 2003). The selection of a sample will result in a more successful

outcome because of the reduction in fatigue and in potential errors from the data collected, especially when a large number of elements are involved (Sekaran, 2003).

Gay and Diehl (1992) stated that determining the correct sample size is crucial for generalization purposes. According to Zikmund et al. (2010), as sample size increases, the likelihood of the error generally decreases. Pallant (2007) also mentioned that although the consensus among scholars about the sample size is limited, a larger sample is proven to represent the population better. Meanwhile, a small sample tends to conclude unreliable correlation coefficients and thus defeats the purpose of the study. Therefore, relatively huge samples are always inclined yield statistically significant results. Based on the rule of thumb, a sample size between 30 and 500 can be considered effective depending on the sampling design and on the research question investigated (Roscoe, 1975). A sample size that is several times larger (ten times) than the number of variables in multivariate studies is often required (Curran–Everett, Taylor, & Kafadar, 1998).

The present study followed the method developed by Krejcie and Morgan (1970) to determine the sample size. According to Krejcie and Morgan (1970), a sample size of 205 is appropriate for a population of 440. The sample size of the present study was further substantiated by the rule of thumb established by Roscoe (1975), who proposed that a sample size bigger than 30 and less than 500 is appropriate and the sample size should be several times (preferably 10 times or more) as large as the number of the variables of the study. The present study has 15 variables. Therefore following this rule, the minimum sample size required was 150. But to ensure greater generalizability of the findings and minimize the sampling error, the present study decided to use the Krejcie and Morgan's formula in determining the sample size (i.e. 205).

## 4.2.3 Sampling Technique

Selection of a sample is a very important step in conducting a research study because the quality of the sample determines the generalizability of the results (Gay & Diehl, 1992). Primarily there are four basic random sampling techniques or procedures to allow for generalizability of the results, namely, random sampling, stratified random sampling, cluster sampling, and systematic sampling. Two standard categories of the sampling method exist. These two categories are called probability sampling and non-probability sampling. Probability sampling is sometimes called random sampling as non-probability sampling is sometimes called non-random sampling. The choice to use probability or non-probability sampling depends on the goal of the research (MacNealy, 1999). When a researcher needs to have a certain level of confidence in the data collection, probability sampling should be used (MacNealy, 1999). Frey, Carl, and Gray (2000, p. 126) indicate that the two sampling methods "differ in terms of how confident we are about the ability of the selected sample to represent the population from which it is drawn...

## 4.2.3.1 Probability Sampling

Probability sampling provides an advantage because of a researcher's ability to calculate specific bias and error in regards to the data collected. Probability sampling is defined as having the distinguishing characteristic that each unit in the population has a known, nonzero probability of being included in the sample (Henry, 1990). It is described more clearly as every subject or unit has an equal chance of being selected from the population (Fink, 1995). There are four types of probability sampling that are standard across

disciplines. These four include simple random sampling, systematic random sampling, stratified random sampling, and cluster sampling.

- 1. Simple random sampling -- A simple random sample is obtained by choosing elementary units in search a way that each unit in the population has an equal chance of being selected. A simple random sample is free from sampling bias. However, using a random number table to choose the elementary units can be cumbersome.
- 2. Systematic random sampling -- A systematic random sample is obtained by selecting one unit on a random basis and choosing additional elementary units at evenly spaced intervals until the desired number of units is obtained.
- 3. Stratified random sampling -- A stratified sample is obtained by independently selecting a separate simple random sample from each population stratum. A population can be divided into different groups may be based on some characteristic or variable.
- Cluster sampling -- A cluster sample is obtained by selecting clusters from the population on the basis of simple random sampling. The sample comprises a census of each random cluster selected.

## 4.2.3.2 Non-probability Sampling

The advantage of non-probability sampling is that it a convenient way for researchers to assemble a sample with little or no cost and/or for those research studies that do not require representativeness of the population (Babbie, 1990). There are four non-probability sampling methods:

- Convenience sampling -- Convenience sampling includes participants who are readily available and agree to participate in a study (Fink, 1995). MacNealy (1999) indicates that convenience sampling is often called accidental.
- Purposive sampling -- Purposive non-probability sample is also known as judgment
  or judgmental (Babbie, 1990). Purposive sampling is selecting a sample when a
  researcher knows the population, its elements, and the nature the research aims
  (Babbie, 1990).
- Snowball sampling -- Snowball sampling is used when the population of interest cannot be identified other than by someone who knows that a certain person has the necessary experience or characteristics to be included (MacNealy, 1999).
- 4. Quota sampling -- Quota sampling is where participants are selected non-randomly on the basis of their known proportion to the population (Babbie, 1990).

In the present study a stratified random sampling method was used to determine the sample as the present study could determine significant differences in service organizations by sector with regards to the effect of human resource practices, knowledge management, and competitive strategies on organizational performance. In general, the population of the study consists of six sectors of service organizations, namely, hotels, universities, hospitals, financial services, communication companies, and transportations. To assess the adequacy of depicting the various classes of a population in the sample, especially for increasing the level of accuracy in estimating factors (Nachmias & Nachmias, 1996), stratified sampling technique was employed. Stratified sampling is the process of selecting a sample, in such way that the determined sub-groups in the population are depicted in the sample, in the identical proportion, which they occur in the population (Gay & Diehl,

1992). The steps in stratified sampling are very similar to those in random sampling, where the selection is made from subgroups in the population, rather than the population as a whole. According to Gay and Diehl (1992), stratified sampling involves the following steps:

- 1. Identify and define the population.
- 2. Determine the desired sample size.
- 3. Identify the variable and subgroups (strata) to guarantee appropriate representation (either proportional or equal).
- 4. Classify all members of the population as members of one of the identified subgroups.
- 5. Randomly select an "appropriate,, number of individuals from each of the subgroups.

  "Appropriate,, means either a proportional number of individuals or an equal number of individuals.
- 6. According to the stratified sample steps mentioned above, the study population size was 422. The desired sample size was 205. Proportionate stratified sample was used to ensure that the number of elements in each stratum is proportionate to the number of subjects in the population (Gay & Diehl, 1992). The stratified sample was executed as follows: The estimated 48% was determined by dividing the sample size (i.e., 205) with the total of population (i.e., 422). The sample drawn and its distribution across the stratum are illustrated in Table 4.1. For example, there were 200 hotels in Jordan. To get the proportion of hotels that should be in the sample, we multiplied 48% with 200 hotels. This shows that the number of hotels to be sampled should be 96. To obtain the sample of each service category/stratum, the same

procedure was employed. Once the sample size of each stratum was identified, we used simple random sampling to select the required sample. For instance, a list of 200 hotels was obtained where 96 hotels were selected by drawing the hotel's name from a box. The same procedure was employed in selecting each stratum from the population.

Table 4.1 Selecting the Probability Sample for the Study

Sectors	No. of population	Proportion of 48%	Percentage from each sector	Probability sample size
Hotels	200	96	0.48	166
Universities	29	14	0.48	24
Hospitals	108	52	0.48	89
Communications	TAR 5	4	0.80	4
Transportation	30	15	0.50	25
Financial service	50	24	0.48	42
Total	422	205	0.48	350

Even though the desired sample size was 205, we decided to distribute more questionnaires to avoid a low response rate, a limitation naturally inherent with survey (Almajali & Dahalin, 2011). Because past studies at the organizational level indicated a response rate of approximately 59% (Gharakhani & Mousakhani, 2012; Som, 2008), the researcher decided to use this as the benchmark. Hence, an increase by 59% of the desired sample size of 205 resulted in 325 questionnaires. To ensure a higher response rate, the researcher however decided to distribute 350 questionnaires instead of 325.

## 4.3 MEASUREMENT OF VARIABLES

Measurement of variables or instrumentation is a tool or mechanism for describing specific properties of the variables of interest in a study by assigning numbers in a reliable and

valid manner (Creswell, 2012). As mentioned earlier, this study has four main variables. They are HRM practices, OP, KM, and competitive strategies. The dependent variable for this study is OP, and the independent variable is HRM practices. Knowledge management, on the other hand, is the mediating variable and competitive strategies act as the moderating variable. The independent variable of HRM practices comprises six dimensions, i.e. staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement.

For the purpose of the present study, Likert scale was used to measure HRM practices and knowledge management particularly since it is the most commonly used scale in social research (Garland, 1991; Gwinner, 2007). There is, however, a discrepancy in its use having no clear rule of the suitable number that should be used. Therefore, the numbers vary from one to five or one to seven points. In the present study, a five-point Likert scale was used to measure each item. Researchers indicate that a five-point scale is just as good as any other scale (Fornell, 1992; Solnet, 2006) in that it may reduce confusion to participants. Furthermore, the main advantage of a five-point scale is its ability to detect smaller differences among participants and has the capability to provide the highest level of measurement precision (Hair, Black, Babin, Anderson, & Tatham, 2006). A Likert type scale was chosen because the scale is known for its high reliability and inexpensive administration (Hurt & Teigen, 1977). In addition, the decision to adopt a five-point Likert scale lies in the fact that it can be used to specify the participants' level of agreement to a list of statements. In the questionnaire, a neutral rating was included because there may be participants who truly feel neutral about the topic asked. As Gwinner (2007) opined, neutrality is a legitimate opinion that exists among participants and can be used to indicate their neutrality or mixed agreement. The following shows how each variable was measured.

## 4.3.1 Organizational Performance

Organizational performance has been defined in various ways in that both objective and subjective indicators have been used to measure the concept (Apospori et al., 2008). Organizational performance refers to the actual output or results of an organization as measured against its outputs, goals and objectives (Skrinjar, Bosilj, Indihar & Stemberher, 2008). Subjective measures of performance are perceptual performance measures (Huselid et al., 1997; Wall et al., 2004). Although such self-evaluations tend to be biased, Dess and Robinson (1984) believed that in when other objective criteria are absent, self-evaluations could be appropriate and reliable. In addition, Bamberger, Bacharach, and Dyer (1989) stated that when OP is influenced by external economic factors, subjective evaluation may be more appropriate than objective measures. Subjective measurements of performance have also been found to have a strong correlation with objective measurements and are often used as a valid indicator of performance (Wall et al., 2004).

It cannot be denied that OP has a vital role in strategy research; many views have been put forward on the suitability of the approaches to conceptualize and measure this variable (Venkatraman & Ramanujam, 1986). Based on the fact that this study looked at different service sectors, the researcher used the subjective method to measure performance (Spanos & Lioukas, 2001), as recommended by some researchers when studies are multi-sectorial in nature (Lukas, Tan & Hult, 2001; Venkatraman & Ramanujam, 1986). Differences in OP may be revealed by objective measures because of

the industry and not because there are real differences among firms. It is also worth taking note that many researchers criticize accounting measures of profitability as they can be unreliable and subject to accounting conventions. It could also be subject to managerial manipulation, perhaps, for example to avoid corporate taxes (Spanos & Lioukas, 2001).

In the present study, a similar method of measuring OP used by Pertusa-Ortega, Molina-Azorin and Claver-Cortes (2009) was employed. Participants were asked to indicate the degree of importance assigned by the company to each of the six indicators on a five-point scale, ranging from '1' "not important at all,, to '5' "very important,. Many researchers have used this instrument in their studies (e.g., Govindarajan, 1988; Lee & Miller, 1996; Pelham & Wilson, 1996). The six items were: sales growth, employment growth, market share growth, profits before tax, cash flow, and return on investment. The reliability coefficient alpha for this measure was reported to be .736 (Pertusa-Ortega et al., 2009).

Table 4.2
Organizational Performance Items

Items	Source	Reported a
1. Sales growth	Pertusa-Ortega et al. (2009)	.736
2. Employment growth		
3. Market share growth		
4. Profit before tax		
5. Cash flow		
6. Return on investment		

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## 4.3.2 Human Resource Management Practices

In this study, HRM practices were examined from the standpoint of the general manager that covered four major functional areas of staffing, training, development, performance appraisal, and compensation, which are said to be critical to obtain, motivate and retain employees, and to develop sustainable competitive advantage (Pfeffer, 1995). Added to this, relevant practices that are commonly considered to improve organizational performance, such as job security and employee participation and involvement (Ahmad & Schroeder, 2003; Delery & Doty, 1996; Fey et al., 2000; Forde et al., 2006; Kato & Morishima, 2002; Li, 2004) were also included. The measurement of HRM practices were adopted from several sources because none of the literature reviewed thus far has taken into account all the variables required. Staffing, training and development, performance appraisal, and compensation were adopted from Snell and Dean (1992), while job security, and employee participation and involvement were adopted from Delery and Doty (1996).

The first dimension of HRM practices is staffing. This dimension is operationalized as "the set of activities that are designed to attract and select individuals for positions in an organization," (Snell & Dean, 1992, p. 481). This dimension was measured by eight items developed by Snell and Dean (1992). The measure of staffing developed by Snell and Dean has been widely accepted as reliable and valid by a number of researchers and also has been widely used in a variety of literatures and accepted as a good measure of staffing (e.g., Audea, Teo, & Crawford, 2005; Huselid, 1995; Khan, 2010; Sun, Aryee, & Law, 2007; Vlachos, 2008). The reliability coefficient alpha for this measure was reported to be .86 (Snell & Dean, 1992). Some modifications to the items were made to ensure that participants could relate the items well with their workplace. For example, the original word "company" was replaced by "organization."

The second dimension of HRM practices is training and development. This dimension is operationalized as "a set of activities which are designed to change the

knowledge and skills of employees on order to provide a better match between employee and job characteristics,, (Snell & Dean, 1992, p. 481). This dimension was measured by eight items developed by Snell and Dean (1992). Again, the instrument by Snell and Dean (1992) has been widely accepted as a reliable and valid measure by a number of researchers and also has been widely used in a variety of literatures and accepted as a good measure of training and development (e.g., Audea et al., 2005; Moideenkutty et al., 2011; Rodwell & Teo, 2008). The internal consistency for this measure was found to be .92 (Snell & Dean, 1992). Some modifications to the items were made to ensure that participants could relate the items well with their workplace. For example, the original word "we" was replaced by "my organization."

The third dimension of human resource practices is performance appraisal. This dimension is operationalized as "an evaluation and feedback process about the employees' performance based on the organization's standards, (Snell & Dean, 1992, p. 481). It was measured by eight items developed by Snell and Dean (1992), whose instrument has been widely accepted as a reliable and valid measure by a number of researchers and also has been widely used in a variety of literatures and accepted as a good measure of performance appraisal (e.g., Chand & Katou, 2007; Cho et al., 2006; Huselid et al., 1997). The reliability coefficient alpha for this measure was reported to be .88 (Snell & Dean, 1992). Some modifications to the items were made to ensure that participants could relate the items well with their workplace. For example, the original word "we" was replaced by "my organization."

The fourth dimension of human resource practices is compensation. This dimension is operationalized as "a set of activities generally concerned with providing financial

returns and benefits to employees in return for employment related services provided by the employees, (Snell & Dean, 1992, p. 482). This dimension was measured by six items developed by Snell and Dean (1992). Their instrument has been widely accepted as a reliable and valid measure by a number of researchers and also has been widely used in a variety of literatures and accepted as a good measure of compensation (e.g., Ahmad & Schroeder, 2003; Huselid, 1995; Huselid et al., 1997; Ngo et al., 1998). The reliability coefficient alpha for this measure was reported to be .77 (Snell & Dean, 1992). Some modifications to the items were made to ensure that participants could relate the items well with their workplace. For example, the original word "we" was replaced by "my organization."

The fifth dimension of human resource practices is job security. This dimension is operationalized as "the extent to which an organization provides stable employment for employees," (Zacharatos et al., 2005, p. 78). It was measured by four items developed by Delery and Doty (1996). The instrument developed by Delery and Doty has been widely accepted as a reliable and valid measure by a number of researchers and also has been widely used in a variety of literatures and accepted as a good measure of job security (e.g., Ahmad & Schroeder, 2003; Ichniowski et al., 1997). The reliability coefficient alpha for this measure was reported to be .81 (Delery & Doty, 1996). Some modifications to the items were made to ensure that participants could relate the items well with their workplace. For example, the original word "bank" was replaced by "organization."

Employee participation and involvement is the sixth dimension of human resource practices. This dimension is operationalized as "the degree to which employees were allowed to have input into their work and the degree to which the organization valued their

input,, (Delery & Doty, 1996, p. 815). This dimension was measured by four items developed by Delery and Doty (1996), whose instrument has been widely accepted as a reliable and valid measure by a number of researchers and also has been widely used in a variety of literatures and accepted as a good measure of employee participation and involvement (e.g., Huselid et al., 1997; Katou & Budhwar, 2006). The reliability coefficient alpha for this measure was reported to be .84 (Delery & Doty, 1996). Some modifications to the items were made to ensure that participants could relate the items well with their workplace. For example, the original word "superiors" was replaced by "managers." The list of items used to measure human resource practices containing six dimensions are outlined in Table 4.3.

Table 4.3
Human Resource Management Practices Items

Human Resource	e Management Practices Items		
Dimensions	Items	Source	Reported a
Staffing	My organization adopts very extensive	Snell and	.86.
	selection processes (e.g. uses tests,	Dean (1992)	1

selection processes (e.g. uses tests, Dean (1992) interviews, etc.).

Management gives a great deal of importance to staffing processes to select the best person for the position.

More than five persons are involved in making a selection decision.

Generally, my organization takes a long time to select someone for a position from the time the position becomes open.

My organization screens twenty or more applicants for each vacant position.

My organization selects managers and employees by matching managerial characteristics with the strategic plan of the organization.

My organization believes in the need to

identify effective managerial

Training and development	characteristics for long-term operations. My organization occasionally changes staffing patterns in order to help implement business or corporate strategies. My organization has very extensive training programs for members in all work units. Management gives a great priority to training initiatives.	Snell and Dean (1992)	.92
	The training processes are very structured.		
	A typical employee receives, on the average, 48 hours of formal training per		
	year.		
	During the past year, 100 per cent of		
	employees received training.		
	Management allocates and spends a great		
/	deal of money for training.		
(5)	My organization provides a wide variety of		
(3/1	training programs for staff.  My organization feels that training is		
Z	viewed as an investment.		
Performance	My organization provides a great deal	Snell and	.88
appraisal	of effort in measuring employee	Dean (1992)	
	performance.	Maraysia	
	My organization uses flexible performance		
	standards.		
	Our employees greatly participate in goal-		
	setting and appraisal.		
	Our managers/supervisors regularly		
	discuss with employees their individual performance.		
	My organization places a great deal of		
	emphasis on an employee's personal future		
	development when discussing his/her		
	performance.		
	Key personnel are evaluated based on their		
	potential for carrying out strategic goals.		
	Pay rise, promotions, training and		
	development, and other rewards are very		
	alasala limba d $A_{\alpha}$ $F_{\alpha}$		

closely linked to performance appraisal.

Compensation	Only one person provides input to the performance evaluation of each employee.  My organization provides higher pay rates	Snell and	.77
Compensation	when compared to other organizations	Dean (1992)	.,,
	within the same industry.		
	Compared to past years, this year's pay		
	level in my organization is generally higher.		
	My organization very closely links pay		
	with individual performance.		
	The compensation program is occasionally		
	modified to encourage employees and		
	managers to achieve long-term objectives.		
	There is a great deal of difference in pay		
	across members.		
	My organization provides a profit-sharing policy and flexible bonus scheme.		
Job security	Employees in their jobs can expect to stay	Delery and	.81
soo security	in the organization for as long as they	Doty (1996)	.01
A	wish.		
Z	It is very difficult to dismiss an employee	Y	
[-]	in his/her job.		
	Job security is almost guaranteed to	Malaysia	
	employees in their jobs.	,	
	If the organization were facing economic		
	problems, employees in their jobs would		
	be the last to get cut.		
Employee	Employees in their jobs are allowed to	Delery and	.84
participation	make many decisions.	Doty (1996)	
and	Employees in their jobs are often asked by		
involvement	their supervisor to participate in decisions.		
	Employees are provided the opportunity to		
	suggest improvements in the way things		
	are done.  Managers keep open communications with		
	Managers keep open communications with employees in their jobs.		
	-mp.ojeeo in men jooo.		

## 4.3.3 Knowledge Management

Knowledge management is defined as the processes in an organization that are used to develop knowledge in an organization (Gold et al., 2001). According to Chuang (2004), KM can be categorized into four groups: structural KM resource, cultural KM resource, human KM resource, and technical KM resource. To elaborate further, structural KM resource is based on the work of Gold et al. (2001), who assessed the following: (1) the extent to which an organization depends on interactions among employees, and (2) the importance of knowledge sharing and creation of new knowledge. In other words, it reflects the capability of structural KM of organizations. On the other hand, cultural KM resource assesses the extent to which an organization supports and encourages knowledge related activities. The human KM resource work of Chuang (2004) was used to assess the knowledge domains of employees as well as all their applications in particular products. These items assessed the capability of technical KM contributions to daily operations, as well as the ability to retrieve and utilize knowledge. The list of items used to measure knowledge management is outlined in Table 4.4.

Table 4.4

Knowledge Management Items

<b>Dimensions</b>	Items	Reported
		α
Structural	Our organization structure facilitates the discovery of new	.81
knowledge	knowledge.	
	Our organization structure facilitates the creation of new	
	knowledge.	
	Our organization has reward system for sharing knowledge.	
	Our organization facilitates knowledge exchange across	
	functional boundaries.	
	Our organization employees are readily accessible.	

Cultural knowledge	Employees understand the importance of knowledge. Employees are valued for their individual expertise.	.81
	Employees are encouraged to interact with other groups.	
	The benefits of sharing knowledge outweigh the costs.	
	Employees are encouraged to explore and experiment.	
Technical	Our organization establishes product/service knowledge.	.68
knowledge	Our organization establishes process knowledge.	
	Employee uses technology to cooperate with inside person.	
	Use technology to search for new knowledge.	
	Use technology to retrieve knowledge about its products and processes.	
	Use technology to retrieve knowledge about its markets and competition.	
Human resource	Employees can understand not only their own tasks but also others' tasks.	.68
knowledge	Employees can make suggestions about others' task.	
ano wreage	Employees can communicate not only with their own	
[3]	department members but also with other department members.	
E	Employees are specialists in their own part.	
C Cl-	(2004)	

Source: Chuang (2004)

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Many researchers have been used the instrument developed by Chuang (2004) (e.g., Emadzade et al., 2012; Liao, Wang, Chuang, Shih, & Liu, 2010; Zaied et al., 2012). The reliability coefficient alphas reported were as follows: .81 for the structural KM measure (Chuang, 2004); .68 for the technical KM measure (Chuang, 2004); .81 for the cultural knowledge management measure (Chuang, 2004); .68 for the human KM measure (Chuang, 2004).

## 4.3.4 Competitive Strategies

Porter (1980) defined competitive strategies as the fundamental pattern of present and planned resource deployment and environmental interactions that indicate how the organization will achieve its objectives. As with other researchers (e.g., Dess & Davis, 1984; Spanos & Lioukas, 2001), the present study also used the generic competitive strategies of Porter, which are cost leadership and differentiation strategies. There are two types of differentiation strategies, i.e. via innovation (through new products or new technologies), and via marketing (offering attractive packages, good services, suitable locations, good products or service reliability level or a brand image).

The competitive strategy items were determined using a synthesis of the items used in earlier studies (e.g., Beal, 2000; Govindarajan, 1988). Competitive strategies were measured by 25 items adopted from Pertusa-Ortega et al. (2009). The reliability coefficients for each type of strategy were reported as follows: .769 for cost leadership measure; .794 for marketing differentiation strategy; and .711 for innovation differentiation (Pertusa-Ortega et al., 2009). A five-point scale ranging from '1' "We do not use this strategy at all,, to '5' "This strategy is very important for our firm,, was used. The list of items used to measure competitive strategies is outlined in Table 4.5.

Table 4.5

Competitive Strategies Items

Dimensions	Items	Reported a
Cost	1. Minimization of general costs.	.769
leadership	2. Minimization of production costs.	
	3. Lower costs than competitors.	
	4. Economies of scale.	
	5. Process automation.	
	6. Productivity improvement.	

- 7. Lower prices than competitors.
- 8. Cost standards.
- 9. Minimization of advertising expenses.
- 10. Cost centers.

Marketing differentiation

- 1. Intensive promotion.
- 2. Intensive sales force.
- 3. Advertising campaigns.
- 4. Brand image.
- 5. Complementary services.
- 6. Advertising costs.
- 7. Market share.

Innovation

1. Leaders or followers.

.711

.794

- differentiation 2. Frequency of product innovations.
  - 3. Higher quality of performance.
  - 4. No. of incremental innovations.
  - 5. Frequency of process innovations.
  - 6. No. of patents.
  - 7. Delivery speed.
  - 8. No. of radical innovations.

Source: Pertusa-Ortega et al. (2009).

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#### 4.4 QUESTIONNAIRE DESIGN

The questionnaire had five sections: the first section dealt with the demographic information of the participants such as the number of years as general manager, age, gender, and level of education; the second section was about human resource practices; the third section organizational performance; the fourth knowledge management; and the fifth section about competitive strategies.

In designing the questionnaire with the purpose of acquiring a high response rate, the main guidelines developed by Dillman (2000) were followed. The first step involved translation of the questionnaire from the Arabic to the English language based on the anticipation that it would be easier for the participants to comprehend the questions written in the Arabic language since this language is the lingua franca of the Jordanian people in particular and in the Middle East in general. Preparing the questionnaire in the Arabic language would also act as an encouragement for the participants to complete the survey. According to Sekaran (2003), it is imperative to make sure that the translation of the instrument is carried out accordingly for an effective outcome. The English original version was translated into Arabic by a language teacher who is expert in both languages in order to further clarify the sentences and to correct any grammatical error. This was followed by the translation of the Arabic version back into English by another qualified language teacher. Based on both translations, the researcher concluded that no significant deviations in the meaning occurred, and the Arabic version was then used for data collection purposes. Appendix A shows the final questionnaire designed for the present study.

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#### 4.5 PILOT STUDY

It is argued that it is always useful to carry out a pilot study before collecting any necessary data (Saunders, Lewis, & Thornhill, 2003). This notion is based on many reasons and in this particular case it is basically to test the adequacy level of the research instrument as well as to pinpoint whether the instrument in question would be appropriate for the Jordanian context. Moreover, the comprehension of vocabulary, statements and wordings had to be tested to make sure that the actual participants i.e. the general managers would be able to understand. In addition, the goal of the pilot test is to achieve a constant flow of construction and revision of the questionnaires for the purpose of carrying out the

necessary modifications after the pilot study is done (Yin, 1994). Therefore, a pilot study is highly recommended before sending the questionnaires to the actual participants. Sekaran (2003) summarizes the importance of the pilot study by stating that it is performed in order to correct any inadequacies pertaining to the questionnaire before data can be collected.

Table 4.6 Reliability Coefficients of Multiple Items in Pilot Study (n = 30)

Variable	No. of items	Cronbach's alpha
Staffing	8	.787
Training and development	8	.848
Performance appraisal	8	.846
Compensation	6	.809
Job security	4	.773
Employee participation and involvement	4	700
Technical KM resource	6	.833
Structural KM resource	5	.780
Cultural KM resource	5	.739
Human KM resource	4	.749
Cost leadership	10	.726
Marketing differentiation	7	.822
	rsiti Utara N	Malaysi.895
Organizational performance	6	.851

In the present study, the pilot study was carried out involving Jordanian general managers in other organizations. A total of 40 questionnaires were distributed to participants working in other organizations in Jordan. Based on Swenson and Wretman's (1992) study, around 2-10 percent of the total population is appropriate to be considered in the pilot-test of the questionnaires. Hence, in accordance with the population size of the present research which is 422, the researcher distributed 40 questionnaires for the pilot-test. Approximately one month was taken to complete the distribution and collection of the

questionnaires and it was done using the self-administrated method. Of 40 questionnaires distributed, only 30 questionnaires were returned.

The internal consistency of the measurement was determined using Cronbach's alpha based on the 30 questionnaires obtained from the pilot study. The result of the reliability analysis is shown in Table 4.6. High reliabilities were found, suggesting that all indicators were internally reliable because the alpha values were .7 or above, as recommended by Nunnally (1978).

#### 4.6 DATA COLLECTION PROCEDURES

In the present study, questionnaires were used to collect data from service organizations in Jordan. According to Sekaran (2003), using a structured questionnaire is an appropriate technique because it is less time consuming than interview techniques. Additionally, questionnaire has always been considered an effective instrument of data collection especially when the researcher is aware of what is needed and how to measure the variables that are included in the research framework (Sekaran, 2003). Moreover, a questionnaire is comparatively easy to analyze, involves low cost to administer, familiar to most people, and can help to reduce bias as researcher's influence on the participants' answers is minimized (Malhotra, Agarwal, & Peterson, 1996).

As mentioned earlier, since the unit of analysis in this study is organization, data had to be collected from a representative of the organization. As such, general managers were deemed fit to play such role. There are two reasons for targeting the general managers. First, they had easy access to related data on HRM activities. Second, they had the knowledge about the overall activities of the organization, such as organization's

history, operations, and business strategy (Som, 2008). The questionnaires were personally given to them to ensure a high level of response. In addition, by doing so the researcher was able to explain the purpose and the benefits of the study and to encourage the participants to provide honest answers (Sekaran, 2003). In addition, personally administered surveys are more valid than low-cost interviews, as the former incurs less error than the latter (Creswell, 2012). All in all, 350 questionnaires were personally distributed.

Because of the geographic distribution of the service organizations, the population of this study was divided into three regions: mid, north and south. In the south region, the questionnaires were distributed to the general managers in to 60 hotels, 4 universities, and 6 hospitals located in various cities such as Aqaba, Karak, Tafeeleh and Maan. In the north, 8 universities, 10 hotels, and 15 hospitals were approached in cities like Irbid, Jarash, Mafraq, and Ajloun. In the mid region, the questionnaires were to the majority of hotels, universities, hospitals and financial services in cities like Amman, Zarka, Salt and Madaba.

The survey was conducted between January 2012 and April 2012. The researcher travelled to Jordan to perform the fieldwork, including the subsequent follow-up actions, between January 2012 and April 2012. In order to ensure adequacy of response, a covering letter accompanied each questionnaire to highlight the importance of the participants' involvement. The covering letter explained the research objectives and assured confidentiality of provided information. An official letter from the department of the general manager and from Universiti Utara Malaysia was used to seek cooperation. The letter offered a brief introduction to the research and its objectives, and requested permission to conduct the research (see Appendix A).

Once the cover letter was prepared, the next step was to contact the general managers to have their permission to distribute the questionnaire and to meet them to discuss the research project. Telephone calls were made to the general managers through their secretaries. Upon meeting the general managers, the researcher introduced himself first and then discussed the research topic and the expected advantages. In these meetings, it was stressed that the general managers were the only one who can complete the questionnaire due to the nature of the study. After ensuring that such was the case, the general managers received the questionnaire to be completed. The researcher followed up the collection process through phone calls after three weeks from the date of the survey distribution. Many reminders were made through phone calls with general managers' secretaries. Since the sample was spread over a wide geographical area, the timing of data collection was another serious issue. Several follow-up actions were undertaken to guarantee a higher rate of response for the survey, which can support the criteria of the study requiring a minimum number of 205 participants (Krejeie & Morgan, 1970).

#### 4.7 DATA ANALYSIS TECHNIQUES

To analyze the data collected, SPSS software version 18 was used. Statistical tests available in SPSS were employed including factor and reliability analysis, descriptive statistics, correlation analysis, multiple regression analysis, and hierarchical multiple regression analysis. Different statistical tests have different functions. For instance, hierarchical regression was utilized to test whether competitive strategies moderate the relationship between knowledge management and organizational performance, and to test whether knowledge management mediates the relationship between human resource

practices and organizational performance. On the other hand, descriptive statistics were run to describe the characteristics of the data and to profile the participants.

## 4.7.1 Factor Analysis

Factor analysis is attributable specifically to Karl Pearson and Charles Spearman in the early 20<sup>th</sup> century (Johnson & Wichern, 2007). Factor analysis primarily aims to reduce the large range of variables into more manageable groups (Lehman, 1989). In the present study, the researcher uses factor analysis to determine the dimensions of the four variables: Human resource practices, knowledge management, competitive strategies and organizational performance. Factor analysis was carried out following the main steps suggested by Pallant (2007), as follows:

- 1. Appropriateness of data for factor analysis was achieved by accomplishing the expected assumptions such as adequacy of the sample size, adequacy of the correlations between the variables in the same factor, the linearity condition, and the outliers.
- 2. Factor extraction was done to yield valuable/meaningful factors. The researcher used principle component analysis (PCA), based on Pallant (2007) and Stevens (1996). By using PCA, the main variables were classified into smaller linear variables, and the shared variance was examined (Tabachnick & Fidell, 2007). Tabachnick and Fidell (2007) considered this as the best option to perform an experimental review of the variables.

Factor rotation and explanation was the final step in factor analysis. Sometimes it is
necessary to repeat the rotation particularly if there are high loadings in more than
one factor.

## 4.7.2 Reliability and Validity

Reliability analysis is used to conduct an assessment of the consistency level between the variable measurements (Hair et al., 2010). Reliability refers to the level to which a variable or set of variables is aligned with the item terms that it attempts to measure (Hair et al., 2010). In case multiple measures are considered, measures consistency is achieved. Hence, reliability is a representative of the internal consistency of the measure. In this regard, Zikmund et al. (2010) contended that reliability can only be measured when various measures achieve the same outcome. Reliability is considered to be inversely related to measurement error and hence, when it increases, the interrelationship between a construct and indicator also shows an increase. In other words, the construct explains more of the variance in every indicator (Hair et al., 2010).

Normally, internal consistency is measured by a coefficient alpha. The most commonly applied estimate of reliability for a multiple-item scale is the computation of the average of all possible split-half reliability values (Zikmund et al., 2010). Coefficient alpha values range from 0 to 1, with 0 indicating no consistency and 1 indicating complete consistency (Pallant, 2007; Zikmund et al., 2010). The entire items produce corresponding values and the scales having a coefficient alpha values that fall between .80 and .95 are deemed to have a very good reliability, those that fall between .60 and .70 are deemed to have fair reliability, and finally those that fall below .60 is deemed to have poor reliability

(Zikmund et al., 2010). As recommended by Nunnally (1978), the minimum level of reliability is .70. Values below .70 indicate a lower limit of acceptability (Hair et al., 2010), whereas higher values indicate higher reliability (Pallant, 2007).

## 4.7.3 Correlation Analysis

According to Pallant (2007), analysis of correlation is a statistical technique which is used to explain the strength and direction of the linear relationship between two variables. The degree of correlation assesses the strength and significance of the relationship between the variables. An ideal correlation of 1 or -1 reveals that the value of one variable can be precisely determined when the value of the other variable is known. In addition, the correlation value of 0 means absence of relationship between these two variables. Cohen's (1988) rule explains the strength of the relationship between two variables (r) (see Table 4.6).

Table 4.7

Cohen's Guideline of Correlation Strength

r values	Strength of relationship
r = +.10 to .29 or $r =10$ to29	Small
r = +.30 to .49 or $r =30$ to49	Medium
r = +.50 to 1.0 or $r =50$ to1.0	Large

In the present study, bivariate correlation was conducted to test the relationship between dependent variable (organizational performance), independent variable (human resource practices), mediator (knowledge management) and moderator (competitive strategies). Bivariate correlation was the most stable method to measure the correlation and determine the relationship between the variables (Gay & Diehl, 1992). The correlation

coefficient provides an estimation of how related two or more variables are (Gay & Diehl, 1992) and indicates the magnitude, direction and significance of the relationship (Sekaran, 2003).

## 4.7.4 Descriptive Statistics

Descriptive statistic are undertaken to provide background information of the participants. Pallant (2007) reveals that descriptive statistics aim to: (a) depict the different attributes of the data; (b) verify any violation of the principle assumptions for the statistical methods to be used in the study and; (c) address particular research questions. In the present study, descriptive statistics (mean, standard deviation, maximum and minimum) for all the variables of interest were obtained.

## 4.7.5 Multiple Regression Analysis

This analysis is a method used to determine the relationship between one continuous dependent variable and different independent variables. Several methods of this analysis can be utilized such as standard, hierarchical or sequential, and stepwise regression (Tabachnick & Fidell, 2007). Regression analysis is also useful for analyzing the relationship between variables and for testing the proposed hypotheses. However, before conducting regression analysis, five assumptions should be considered and they are normality, independence of the error term, linearity of the relationship, multicollinearity, and homoscedasticity (Hair et al., 2010).

To begin with, normality refers to the score of each variable that is normally distributed. Normality can be determined via the score histograms of each variable

(Pallant, 2007). On the other hand, linearity is the linear relationship between variables and linearity is exemplified by a rough straight line rather than a curve when viewing a scatter plot of scores (Pallant, 2007) and homoscedasticity refers to the similarity among various scores in variables X and Y, such that when the scatter plot is examined, a fairly even blocked shaped figure is observed along its length (Pallant, 2007). Moreover, multicollinearity is the integration between independent variables that exists only when such variables are correlated significantly or where r =0.9 and over (Pallant, 2007). To identify multicollinearity, one of the variables may be dropped, or a complete composite may be created from two highly correlated variables scores (Pallant, 2007). Furthermore, outliers are examined via casewise diagnostics, and those identified are excluded from further analysis (Hair et al., 2010). In the present study, multiple regression analysis was conducted to examine the relationship between human resource practices and organizational performance, and the relationship between human resource and knowledge management, as well as the relationship between knowledge management and organizational performance.

## 4.7.6 Hierarchical Multiple Regression

As mentioned, in the present study, hierarchical type of multiple regression analysis was conducted to test the mediating effects of knowledge management on the relationship between human resource practices and organizational performance, as well as to test the moderating effect of competitive strategies on the relationship between knowledge management and organizational performance. The results of the mediating effect and the moderating effect will be discussed in the following chapter

## 4.8 SUMMARY

This chapter described the research methodology used in the present study to investigate the relationship among human resource practices, knowledge management, competitive strategies, and organizational performance in the service sector in Jordan. This chapter presented the specific research methodology comprising research sample, data collection procedures, and measurement of variables. Additionally, the population and sample of the study have been presented. A brief explanation of the main statistical analyses to be run to assess and test the data has also been offered. The proceeding chapter will present the results of these analyses.



#### **CHAPTER FIVE**

#### **FINDINGS**

#### 5.0 INTRODUCTION

This chapter presents the findings of the study in respect to the objectives, outlined in chapter one. It starts with response rate, followed by profile of the participants, data screening, and missing data. Next the analysis on goodness of measures to test the validity and reliability of the variables is presented. Finally, the results of the hypotheses testing are presented.

#### 5.1 RESPONSE RATE

It is worth to mention again that 350 questionnaires were personally distributed to general managers at Jordanian service organizations. Out of 350 questionnaires, 70 unreturned, while 20 were incomplete because the participants failed to answer a substantial number of items. Therefore, 260 questionnaires were usable for further analysis, yielding a response rate of 74%. Jobber (1989, p. 134) described response rate as "the percentage of total questionnaire mailed (and not returned by the postal service as undelivered) that were returned by participants,,. The response rate of 74% was considered to be excellent. According to Sekaran (2003), a response rate of 30% is considered acceptable for surveys in a behavioral science research. Table 5.1 shows the response rate and the usable questionnaires for this study.

Table 5.1
Summary of Response Rate

Summerly of Mesponse Mere	
Questionnaires distributed	350
Unreturned	70
Incomplete	20
No.	260
of responses	
Response rate (260/350)	74%

#### 5.2 PROFILE OF PARTICIPANTS

Table 5.2 provides background information of the participants who participated in the survey. The characteristics examined included sex, age, education level, experience as a general manager, type of organization, number of employees, type of ownership, sales turnover, profit, and the duration of establishment.

Table 5.2 shows that 79.6% of the participants were male. This result reflected the nature of Jordanian and Arab culture in general where males dominate and hold top management positions. This result was consistent with Al-Gahtani, Hubona, and Wang (2007) who revealed rigid restrictions for women compared to men to enter the labor market in the Middle East, and women in top management positions are very limited. Majority of the participants had a bachelor's degree (66.9%). The results indicated that education level is an important factor in seeking employment in the service organizations.

Majority of the participants were from locally owned organizations (92.3%). Furthermore, majority of them worked in hospitality organizations (58.8%), followed by health (24.3%), financial services (6.5%), education organizations (5.4%), and finally, communication and transportation (5%). With respect to age, on average, the participants were relatively young (mean = 41.69 years old, SD = 6.74). With respect to length tenure, on average, they had been working relatively long time in their organizations (mean = 4.92

years, SD = 2.91). With regards to the number of employees, on average, the service organizations employed around 320 people (mean = 361.07, SD = 201.28). On average, the sampled organizations recorded estimated sales turnover of JD14 million (mean = 14.08, SD = 19.53), with profits around JD3 million (mean = 2.86, SD = 2.71). On average, the sampled organizations had been in operation for 19 years already (mean = 19.41, SD = 6.84).

Table 5.2

Profile of Participants (n = 260)

Items	Frequency	Percentage
Sex		
Male	207	79.6
Female	53	20.4
Education level		
Diploma or below	20	7.7
Bachelor	174	66.9
Master	64	24.6
PhD	2	.8
Type of organization	Universiti Utere	Malavala
Education	Univers <sub>i</sub> ‡i Utara	$Malay_{5.4}a$
lealth	63	24.3
ospitality	153	58.8
ommunication	4	1.5
ransportation	9	3.5
inancial services	17	6.5
ype of ownership		
oint venture	9	3.5
ocal	240	92.3
nternational	11	4.2
Age	Mean = 41.69	SD = 6.74
xperience as general manager	Mean = 4.92	SD = 2.91
umber of employees	Mean = $361.07$	SD = 201.28
ales turnover (JOD)	Mean = 14.08	SD = 19.53
rofit (JOD)	Mean = 2.86	SD = 2.71
Ouration of establishment	Mean = $19.41$	SD = 6.84

Note.

SD = Standard deviation; JOD = Jordanian dinar

## 5.3 MISSING DATA

A frequency test was run for every variable to identify any missing responses. As a result, 20 questionnaires were found to be unusable. An inspection of the data set revealed incomplete responses in section A (Demographic Variables), section C (HRM Practices), and section D (Organizational Performance) of the questionnaire. Hence, these missing responses were excluded from the data analysis, which resulted in 260 usable responses. This procedure is known as case-wise deletion and is preferred to other methods of analyzing missing responses (Malhotra, 1998). In case-wise deletion only cases with complete records are included. Missing data was repaired according to the mean substitution imputation method, and replaced with the average of the data from the cases where complete data is available (Hair et al., 2006).

## 5.4 GOODNESS OF MEASURES

According to Sekaran (2003), the procedures for testing the goodness of measures must be utilized prior to any analysis. The techniques for testing the goodness of measures suggested by Sekaran (2003) were subsequently followed. These included factor analysis and reliability analysis. The results of factor and reliability analysis for all of the study variables are described as follows.

#### 5.4.1 Factor Analysis

Factor analysis is a general term used to address a set of methods that primarily define the underlying data matrix structure (Hair et al., 2006; Pallant, 2007). The main aim of factor analysis is the minimization of the many number of variables into a more manageable set

of factors (Lehman, 1989). The method considers that there are only a few main primary dimensions underlying the attributes of particular constructs to be measured. It then correlates these attributes for the identification of the primary dimensions (Churchill, 1999).

Before factor analysis can be applied, many assumptions have to be met; the first being the assumption concerning sample size. As proposed by Hair et al. (2006), the acceptable ratio between the variables which are to be analyzed to the sample size must be at least 1:10. The sample size should be at least ten times as many as the variables in each factor test. The present study has 15variables; therefore, the sample size should be not less than 150 respondents. In this present study, we had a sample of 260 respondents, and the ratio between the variables used in factor analysis and sample size is 1:17. Therefore, the first assumption for applying factor analysis was met. The second assumption is regarding the data type used. According to Hair et al. (2006), the data for factor analysis should be a metric measurement. In the present study, the entire variables were measured on a metric scale, and hence satisfying the second assumption. The third assumption concerns the factorability of the correlation matrix. There are three common tests employed to ascertain factorability of the correlation matrix namely Kaiser Meyer Olkin (KMO), Bartlett's Test of Sphericity (BTS), and Measuring of Sampling Adequacy (MSA) (Hair et al., 2006). Hair et al. (2006) proposed a guideline to interpret the KMO values with the following indicators: KMO value in the .90s is marvelous; .80s are meritorious; .70s are middling; .60s are mediocre; .50s are acceptable but miserable; and below 0.50 is unacceptable.

After meeting the assumptions, we then proceeded with determining factor loadings. In this step, the following requirements were followed:

- Factor loading should be .50 or more. There should be no cross loading between the
  variables and each component should have more than on variable. To extract the
  number of factors or dimensions, latent root criterion, scree plot, and percentage of
  variance explained criterion were used.
- Varimax rotation was employed to guarantee that all the correlated variables are presented in the same factor.
- New factors were labeled based on their components to provide meanings to the factors.

## 5.4.1.1 Results of Exploratory Factor Analysis

For the purpose of factor analysis, the questionnaire items were categorized into four components. The first component is HRM practices, which include items of staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement. The second component is KM dimension items which include technical KM resource, structural KM resource, cultural KM resource, and human KM resource. The third component is competitive strategies dimension items which include cost leadership, marketing differentiation, and innovation differentiation. The fourth component is OP. Factor analysis was employed on each of the four groups.

## 5.4.1.1.1 Factor Analysis for Human Resource Management Practices

Hair et al. (2006) recommended the following stages to run factor analysis:

 Ascertaining the number of extracted factors by using initial un-rotated matrix and scree plot factors.

- 2. Rotating the number of factors from the initial factor matrix that leads to a reduction of the number of variables.
- 3. Deciding whether there is a need to delete any variables due to cross-loading.

In the present study, factor analysis was performed on HRM practices comprising staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement factors. Using the criteria mentioned earlier (factor loading greater than .5 and no cross-loading of variables), we then examined KMO and BTS results to see whether factor analysis was suitable. Results are shown in Table 5.3.

Table 5.3 shows the value of KMO was .810, which is "meritorious, according to Kaiser 1974) as it was above .80. The BTS value was very large (1807.758) and significant (p < 0.001). The KMO and BTS values indicated the HRM practices variables were appropriate for factor analysis.

Table 5.3 shows that HRM practices consisted of six dimensions. The first dimension was staffing. There were eight items of staffing. Out of the eight items, five items (S1, S4, S5, S6, and S7) were deleted during the exploratory factor analysis and three items (S2, S3 and S8) remained to be analyzed. All three items had a factor loading of more than .50. This suggested that the three items correlated very significantly to the factor itself with factor loadings ranging from .654 to .890 (Hair et al., 2006). This analysis confirmed that the three items measured staffing. The second dimension was the training and development variable, which has eight items. Out of these eight items, five items (T2, T3, T4, T5, and T8) were deleted during the process of exploratory factor analysis. The remaining three

items (T1, T6, and T7) were analyzed. All three items had a factor loading of more than .50, meaning that the three items correlated very significantly to the factor itself with factor loadings ranging from .714 to .812 (Hair et al., 2006). This analysis confirmed that the three items measured training and development. Next is the dimension of performance appraisal, which had eight items. Out of these eight items, four items (PA1, PA2, PA3, and PA8) were deleted and four items (PA4, PA5, PA6, and PA7) remained to be analyzed. All four items had a factor loading of more than .50. This suggests that the four items correlated very significantly to the factor itself with factor loadings ranging from .627 to .761 (Hair et al., 2006). This analysis confirmed that the four items measured performance appraisal.

Compensation had six items but only three (C3, C4, and C5) were confirmed by factor analysis with the remaining three (C1, C2, and C6) deleted. The remaining three had factor loading ranging from .728 to .850 (Hair et al., 2006). This confirmed that the remaining items measured compensation. There were four items of job security. After the researcher run exploratory factor analysis for this variable, there were no differences between the original items and the new items. Thus, the same labels were used for each factor. All four items had a factor loading of more than .50. This suggests that the four items correlated very significantly to the factor itself with factor loadings ranging from .672 to .787 (Hair et al., 2006), which confirmed that the four items measured job security.

Similarly, employee participation and involvement had four items. After the researcher run exploratory factor analysis for employee participation and involvement, there were no differences between the original items and the new items. Thus, the same labels were used for each factor. All four items had a factor loading of more than .50,

which indicates that the four items correlated very significantly to the factor itself with factor loadings ranging from .592 to .702 (Hair et al., 2006). This analysis confirmed that the four items measured employee participation and involvement.



Table 5.3
Summary of Factor Analysis for HRM Practices Construct

	Téama			C	omponents	6	
	Items	1	2	3	4	5	6
Fact	tor 1: Staffing						
1.	Management gives a great deal of importance to staffing processes to select the best person for the position.	.111	.160	.077	.223	.170	.654
2.	More than five persons are involved in making a selection decision.	.105	.000	.051	.095	014	.890
3.	My organization occasionally changes staffing patterns in order to help implement business or corporate strategies.	044	087	.134	.074	.168	.760
Fact	tor 2: Training and Development						
1.	My organization has very extensive training programs for members in all work units.	.148	.186	033	.016	.728	.127
2.	Management allocates and spends a great deal of money for training.	.085	.034	.307	.128	.714	.083
3.	My organization provides a wide variety of training programs for staff.	.108	082	.086	.025	.812	.095
Fac	tor 3: Performance Appraisal						
1.	Our managers/supervisors regularly discuss with employees their individual performance.	.761	084	.050	.043	.031	.172
2.	My organization places a great deal of emphasis on an employee's personal future development when discussing his/her performance.	.627	.121	.221	.159	.219	.014
3.	Key personnel are evaluated based on their potential for carrying out strategic goals.	.719	.030	.317	.195	.082	045
4.	Pay rise, promotions, training and development, and other rewards are very closely linked to performance appraisal.	ra <sup>71</sup> 44	a .088	.204	.140	.137	.023
Fac	tor 4: Compensation						
1.	My organization very closely links pay with individual performance.	.180	.073	.149	.728	.193	.093
2.	The compensation program is occasionally modified to encourage employees and managers to achieve long-term objectives.	.177	.101	.063	.850	.011	.097
3.	There is a great deal of difference in pay across members.	.089	.126	.052	.816	015	.181
Fac	tor 5: Job Security						
1.	Employees in their jobs can expect to stay in the organization for as long as they wish.	.256	.757	150	.062	036	.112
2.	It is very difficult to dismiss an employee in his/her job.	159	.748	021	.142	.137	055
3.	Job security is almost guaranteed to employees in their jobs.	037	.787	.224	.056	.124	041
4.	If the organization were facing economic problems, employees in their jobs would be the last to get cut.	.104	.672	.204	.069	068	.041

Fac	tor 6: Employee Participation and Involvement						
1.	Employees in their jobs are allowed to make many decisions.	.155	.109	.700	.117	.285	.075
2.	Employees in their jobs are often asked by their supervisor to participate in decisions.	.195	.161	.702	.148	.192	047
3.	Employees are provided the opportunity to suggest improvements in the way things are done.	.351	.221	.592	.261	148	.141
4.	Managers keep open communications with employees in their jobs.	.214	090	.695	-086	.009	.241
Eig	envalue	5.28	2.24	1.82	1.70	1.32	1.09
	centage of Variance Explained = 64.159%	25.2	10.6	8.68	8.11	6.32	5.19
	ser-Meyer-Olkin = .810						
Bar	tlett's Test of Sphericity Approx. Chi Square =						
18	07.758; df = 210; Sig = .000						



#### 5.4.1.1.2 Factor Analysis for Knowledge Management

Similar procedures as in the previous section were conducted to identify the underlying dimensions for the variables representing KM. KMO and BTS results are shown in Table 5.4. The table shows the value of KMO of .813, which is "meritorious, according to Kaiser (1974), as it was above 0.80. The BTS value was very large (835.305) and significant (p < .001). The KMO and BTS values indicated that knowledge management was appropriate for factor analysis.

Only two items of the six items of technical KM resource (TKR3 and TKR5) were confirmed by exploratory factor analysis results, meanwhile four items (TKR1, TKR2, TKR4, and TKR6) were deleted. The two items had a factor loading of more than .50. This means that the two items correlated very significantly to the factor itself with factor loadings ranging from .808 to .851 (Hair et al., 2006). This analysis confirmed that the two items measured technical KM resource.

There were five items for cultural KM resource (CKR). After the researcher run exploratory factor analysis for this construct, there were no differences between the original items and the new items. Thus, the same labels were used for each factor. All five items had a factor loading of more than .50, which means that the five items correlated very significantly to the factor itself with factor loadings ranging from .641 to .836 (Hair et al., 2006). The analysis confirmed that the five items measured cultural KM resource.

Similarly, human KM resource (HKR) had four items and following the exploratory factor analysis, no differences were found between the original items and the new ones. The labels used for each factor remained the same. All four items exhibited factor loadings over .50, specifically ranging from .696 to .764 which according to Hair et al. (2006)

signifies all four items' significant correlation to the factor itself. Thus, the analysis confirmed that all four measured human KM resource. Meanwhile, the items of structural KM resource (SKR) were omitted because they possessed low factor loading (below .50) or high cross loading.

Table 5.4
Summary of Factor Analysis for KM Construct

	Itoms		Compo	nents
	Items	1	2	3
Fa	ctor 1: Technical Knowledge Resource (TKR)			
1.	Employee uses technology to cooperate with inside person.	.102	.208	.808
2.	Use technology to retrieve knowledge about its products and processes.	.200	4	.851
Fa	ctor 2: Cultural Knowledge Resource (CKR)			
1.	Employees understand the importance of knowledge.	.729	.252	
2.	Employees are valued for their individual expertise.	.836	.116	
3.	Employees are encouraged to interact with other groups.	.725		.158
4.	The benefits of sharing knowledge outweigh the costs.	.699		.183
5.	Employees are encouraged to explore and experiment.	.641	/S.141	.426
Fa	ctor 3: Human Knowledge Resource (HKR)			
1.	Employees can understand not only their own tasks but also others' tasks.	.233	.710	
2.	Employees can make suggestions about others' task.	.159	.696	.183
3.	Employees can communicate not only with their own department members but also with other department members.		.764	.126
4.	Employees are specialist in their own part.	.117	.747	
Eis	genvalue	3.87	1.64	1.25
Per	recentage of Variance Explained = 61.525% iser-Meyer-Olkin = .813	35.2	14.9	11.4
Ba	rtlett's Test of Sphericity Approx. Chi Square = 835.305; df 5; Sig = .000			

#### **5.4.1.1.3** Factor Analysis for Competitive Strategies

KMO and BTS were used to determine whether factor analysis was appropriate for competitive strategies. Result is shown in Table 5.5, which indicates that the KMO value was .695, which is 'mediocre' according to Kaiser (1974), as it was above .60. The BTS value was very large (715.921) and significant (p < .001).

Table 5.5
Summary of Factor Analysis for Competitive Strategies Construct

	Items		Compo	nents
		1	2	3
Fact	tor 1: Cost Leadership			
1.	Minimization of general costs.	.027	.895	013
2.	Minimization of production costs.	.211	.828	.066
3.	Lower costs than competitors.	.113	.796	036
Fact	tor 2: Marketing Differentiation			
1.	Advertising campaigns.	.860	.062	033
2.	Brand image.	.709	.012	.051
3.	Complementary services.	.708	.089	073
4.	Market share.	.668	.316	.081
Fact	tor 3: Innovation Differentiation	ara Mala	aysia	
	eaders or followers.	.040	.064	.736
2. H	igher quality of performance.	.015	029	.780
3. F1	requency of process innovations.	053	025	.840
Eige	nvalue	2.87	1.87	1.61
	entage of Variance Explained = 63.677%	28.74	18.77	16.16
	er-Meyer-Olkin = .695			
	lett's Test of Sphericity Approx. Chi Square = 715.	921;		
df =	45; Sig = .000	-		

As shown in Table 5.5 above, competitive strategies consisted of three dimensions i.e. cost leadership, marketing differentiation, and innovation differentiation. Cost leadership had 10 items, out of which seven were eliminated (CL4, CL5, CL6, CL7, CL8, CL9, and, CL10). Three remained with factor loadings of over .50, for analysis (CL1, CL2,

and CL3). This means that the three items correlated very significantly to the factor itself with factor loadings ranging from .796 to .895 (Hair et al., 2006). This analysis confirmed that the three items measured cost leadership. Meanwhile, marketing differentiation had seven items. Only four items (MD3, MD4, MD5, and MD7) were confirmed while three items (MD1, MD2, and MD6) were deleted. All four items had a factor loading of more than .50, which means that the four items correlated very significantly to the factor itself with factor loadings ranging from .668 to .860 (Hair et al., 2006). This analysis confirmed that the four items measured marketing differentiation. Similarly, out of eight original items for innovation differentiation, three items (ID1, ID3, and ID5) were confirmed while five items (ID2, ID4, ID6, ID, and ID8) were deleted. All three items had a factor loading of more than .50. This indicates that the three items correlated very significantly to the factor itself with factor loadings ranging from .736 to .840 (Hair et al., 2006). This analysis confirmed that the three items measured innovation differentiation.

### BUDI BA

Factor Analysis for Organizational Performance

Similar procedures were used to run factor analysis on organizational performance. Result is shown in Table 5.6, which indicates that the KMO value was .651, which is 'mediocre' according to Kaiser (1974), as it was above .60. The BTS value was very large (106.930) and significant (p < 0.001). The KMO and BTS values indicated that organizational

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performance variable was suitable for factor analysis.

5.4.1.1.4

Organizational performance was measured using six items. As shown in Table 5.6, of six, three items (IMPPE1, IMPPE2, and IMPPE4) were deleted and three items (IMPPE3, IMPPE5, and IMPPE6) remained to be analyzed. All three items had a factor loading of

more than .50. This means that the three items correlated very significantly to the factor itself with factor loadings ranging from .732 to .788 (Hair et al., 2006). This analysis confirmed that the three items measured OP.

Table 5.6 Summary of Factor Analysis for OP Construct

Items	Component
1. Market share growth	.788
2. Cash flow	.787
3. Returns on investment	.732
Eigenvalue	1.77
Percentage of Variance Explained = 59.221%	
Kaiser-Meyer-Olkin = .651	
Bartlett's Test of Sphericity Approx. Chi Square =	
106.930; df = 3; Sig = $.000$	

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#### Reliability Test 5.4.2

Reliability refers to the stability and the consistency test where the instrument measures the concepts and contributes to the goodness of measure (Sekaran, 2003). In the present study, internal consistency was applied to test the level of inter-correlation among items (Sekaran, 2003). Even though internal consistency can be measured by a number of ways, Cronbach's alpha coefficient is still the most popular means, which gives an indication of the average correlation among all items that constitute the scale (Pallant, 2007). As such, internal consistency test was utilized to measure the reliability of the questionnaire instruments. According to Nunnaly (1978), in exploratory studies, the alpha value of .60 is

considered sufficient and acceptable, even though a value of .70 is generally considered good.

Table 5.7 presents the results of the reliability test for each variable. As can be seen from Table 5.7, the Cronbach's alpha value for each variable ranged from .65 to .81, indicating a high reliability for the study variables (Hair et al., 2006). The result suggests that the variables were appropriate for further analysis.

Table 5.7

Reliability Analysis

Factors	Components	No. of items	Cronbach's alpha
HRM practices	Staffing	3	.73
UTARA	Training and development	3	.71
(5)	Performance appraisal	4	.77
/ <del>\$</del> //	Compensation	3	.79
	Job security	4	.75
	Employee participation and	4	.74
	involvement		
Knowledge management	Technical KM resource	a Malaysi	.68
BUDI BAN	Cultural KM resource	a Misilaysi	.81
SODI	Human KM resource	4	.74
Competitive strategies	Cost leadership	3	.80
	Marketing differentiation	4	.74
	Innovation differentiation	3	.69
Organizational performance		3	.65

#### 5.5 DESCRIPTIVE ANALYSIS

In the present section, the variables were subjected to the descriptive statistics in order to identify their characteristics. Specifically, mean, standard deviation, maximum and minimum values were computed. Descriptive statistics for the final list of variables of the study are shown in Table 5.8.

Table 5.8

Descriptive Statistics of Variables

Variables	Minimum	Maximum	Mean	Std.
				deviation
HR practices				
Staffing	2.00	5.00	3.5179	.71277
Training and development	2.00	5.00	3.5115	.69647
Performance appraisal	2.00	5.00	3.5712	.65150
Compensation	1.33	5.00	3.3218	.85667
Job security	2.00	5.00	3.6731	.64973
Employee participation and	2.25	5.00	3.5317	.65958
involvement				
Knowledge management				
Technical KM resource	2.00	5.00	3.5058	.63441
Cultural KM resource	2.00	5.00	3.5662	.65672
Human KM resource	2.25	5.00	3.4894	.61797
Competitive strategies				
Cost leadership	2.00	5.00	3.4128	.79661
Marketing differentiation	2.00	5.00	3.4635	.64658
Innovation differentiation	2.00	5.00	3.2756	.68295
Organizational performance	2.33	5.00	3.4718	.56235

Table 5.8 indicates that the mean of the overall HRM practices dimensions ranged from 3.32 to 3.67. 'Job security' (JS) of human resource practices had the highest mean (3.67) while 'Compensation' (C) of human resource practices had the lowest mean(3.32) with a minimum score of 1.33 and maximum score of 5. In other words, the Jordanian service sector emphasized job security practice the most (mean=3.67, standard deviation = .649), followed by performance appraisal (mean=3.57, standard deviation= .651), employee participation and involvement practice (mean= 3.53, standard deviation= .659), staffing practice (mean= 3.52, standard deviation= .712), and training and development practice (mean= 3.51, standard deviation= .696). The lowest consideration was given to compensation (mean= 3.32, standard deviation = .856).

Result also shows that cultural KM resource (CKR) achieved the highest score (mean = 3.56, standard deviation = .656), followed by technical KM resource (TKR) (mean = .350, standard deviation = .634), and human KM resource (HKR) (mean = 3.48, standard deviation = .617). The results indicated that the Jordanian service sector had high cultural knowledge management resource. With regards to competitive strategies, the table reveals that the mean scores ranged from 3.27 to 3.46, and standard deviations from .646 to .796 for the three dimensions of competitive strategies. The patterns of mean values suggested that competitors actions rated the highest mean score (3.46). This finding indicated that the Jordanian service sector emphasized marketing differentiation the most as its business strategy. This followed by cost leadership (3.41), and innovation differentiation (3.27).

Result also indicates that the mean value for important performance (IMPPE) was 3.47, with a standard deviation of .562. This means that, on average, during the last three years the Jordanian service sector had achieved high important performance.

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#### 5.6 CORRELATION ANALYSIS

This type of analysis is utilized to provide a description of strength and direction of the linear relations between the variables (Pallant, 2007) using Pearson correlation coefficients. Pearson correlation coefficients can only take one value which ranges from - 1 to +1. A perfect correlation of 1 or -1 indicates that the value of one variable can be determined exactly when one knows the value of the other variable. A correlation value 0 indicates no relationship between the specified two variables.

Table 5.9 shows the correlations amongst all the variables. The overall correlation value of the variables was below.50, which indicates a weak association between variables.

The largest and significant correlation coefficient value was between employee participation and involvement and performance appraisal of .551, whereas the lowest correlation coefficient was between marketing differentiation and job security, which showed a correlation coefficient of .004. The correlation matrix also reveals that all the correlations were in the hypothesized positive direction. The result of Pearson correlation suggests that five dimensions of HRM practices were positively and significantly correlated with OP, namely, staffing (r = .287, p < .01), training and development (r = .293, p < .01), compensation (r = .146, p < .01), job security(r = .236, p< .01), and employee participation and involvement (r = .204, p < .01). The table also shows that all dimensions of KM were positively and significantly correlated with OP, namely, technical KM resource (r = .259, p < .01), cultural KM resource (r = .316, p < .01), and human KM resource (r = .377, p < .01). Furthermore, this table shows that only marketing differentiation was significantly correlated with OP (r = .349, p < .01).

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Table 5.9

Pearson Correlation of Study Variables

	S	T	PA	C	JS	EPI	TKR	CKR	HKR	CL	MD	ID	IMMPE
S	1												
T	.263**	1											
PA	.210**	.311**	1										
C	.313**	.209**	.373**	1									
JS	.077	.134*	.152**	.253**	1								
EPI	.277**	.333**	.551**	.337**	.236**	1							
TKR	.161**	.162**	.188**	.025	038	.126*	1						
CKR	.265**	.178**	.355**	.209**	.210**	.335**	.381**	1					
HKR	.315**	.292**	.110*	.150**	.151**	.259**	.233**	.369**	1				
CL	.222**	.083	.039	.013	150**	.118*	.241**	.133*	.275**	1			
MD	.284**	.202**	.148**	.212**	004	.106*	.231**	.343**	.376**	.281**	1		
ID	.145**	.070	.207**	.131*	.024	.123*	.062*	.118*	062	.012	.007	1	
IMMPE	.287**	.293**	.098	.146**	.236**	.204**	.259**	.316**	.377**		.349**	.019	1

Note.

S = Staffing; T = Training; PA = Performance appraisal; C = Compensation; JS = Job security; EPI = Employee participation; TKR= Technical KM resource; CKR= Cultural KM resource; HKR= Human KM resource; CL= Cost leadership; MD= Marketing differentiation; ID= Innovation differentiation, IMMPE= performance.

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

#### 5.7 RESTATEMENT OF THE STUDY HYPOTHESES

In the light of the result of factor analysis, some amendments have to be made to the statements of the hypotheses stated earlier. The amended hypotheses tested in the present study are shown below.

#### 5.7.1 Main Effects

The following three hypotheses are concerned with the relationship between HRM practices and OP, relationship between HRM practices and KM, and finally hypotheses relationship between KM and OP.

#### On HRM practices and OP:

H1a: Staffing is positively related to organizational performance.

H1b: Training and development is positively related to organizational performance.

H1c: Performance appraisal is positively related to organizational performance.

H1d: Compensation is positively related to organizational performance.

H1e: Job security is positively related to organizational performance.

H1f: Employee participation and involvement is positively related to organizational performance.

#### On HRM practices and KM:

H2a: Staffing is positively related to technical KM resource.

H2b: Training and development is positively related to technical KM resource.

H2c: Performance appraisal is positively related to technical KM resource.

H2d: Compensation is positively related to technical KM resource.

H2e: Job security is positively related to technical KM resource.

H2f: Employee participation and involvement is positively related to technical KM resource.

H2g: Staffing is positively related to cultural KM resource.

H2h: Training and development is positively related to cultural KM resource.

H2i: Performance appraisal is positively related to cultural KM resource.

H2j: Compensation is positively related to cultural KM resource.

H2k: Job security is positively related to cultural KM resource.

H2L: Employee participation and involvement is positively related to cultural KM resource.

H2M: Staffing is positively related to human KM resource.

H2N: Training and development is positively related to human KM resource.

H2O: Performance appraisal is positively related to human KM resource.

H2P: Compensation is positively related to human KM resource.

H2Q: Job security is positively related to human KM resource.

H2R: Employee participation and involvement is positively related to human KM resource.

#### On KM and OP:

H3a: Technical KM resource is positively related to organizational performance.

H3b: Cultural KM resource is positively related to organizational performance.

H3c: Human KM resource is positively related to organizational performance.

#### 5.7.2 Interaction Effect

Similar to the above section, the present section also restates the hypotheses as derived from the factor analysis. The hypotheses are concerned with the mediating effects of knowledge management on the relationship between human resource practices and organizational performance, also the moderating effect of competitive strategies on the relationship between knowledge management and organizational performance.

#### On HRM practices, KM and OP:

- H4a: Technical KM resource mediates the relationship between staffing and organizational performance.
- H4b: Technical KM resource mediates the relationship between training and development and organizational performance.
- H4c: Technical KM resource mediates the relationship between performance appraisal and organizational performance.
- H4d: Technical KM resource mediates the relationship between compensation and organizational performance.
- H4e: Technical KM resource mediates the relationship between job security and organizational performance.
- H4f: Technical KM resource mediates the relationship between employee participation and involvement and organizational performance.
- H4g: Cultural KM resource mediates the relationship between staffing and organizational performance.

- H4h: Cultural KM resource mediates the relationship between training and development and organizational performance.
- H4i: Cultural KM resource mediates the relationship between performance appraisal and organizational performance.
- H4j: Cultural KM resource mediates the relationship between compensation and organizational performance.
- H4K: Cultural KM resource mediates the relationship between job security and organizational performance.
- H4L: Cultural KM resource mediates the relationship between employee participation and involvement and organizational performance.
- H4M: Human KM resource mediates the relationship between staffing and organizational performance.
- H4N: Human KM resource mediates the relationship between training and development and organizational performance.
- H4O: Human KM resource mediates the relationship between performance appraisal and organizational performance.
- H4P: Human KM resource mediates the relationship between compensation and organizational performance.
- H4Q: Human KM resource mediates the relationship between job security and organizational performance.
- H4R: Human KM resource mediates the relationship between employee participation and involvement and organizational performance.

#### On KM, OP and moderating effect of competitive strategies:

- H5a: Cost leadership moderates the relationship between technical KM resource and organizational performance.
- H5b: Cost leadership moderates the relationship between cultural KM resource and organizational performance.
- H5c: Cost leadership moderates the relationship between human KM resource and organizational performance.
- H5d: Marketing differentiation moderates the relationship between technical KM resource and organizational performance.
- H5e: Marketing differentiation moderates the relationship between cultural KM resource and organizational performance.
- H5f: Marketing differentiation moderates the relationship between human KM resource and organizational performance.
- H5g: Innovation differentiation moderates the relationship between technical KM resource and organizational performance.
- H5h: Innovation differentiation moderates the relationship between cultural M resource and organizational performance.
- H5i: Innovation differentiation moderates the relationship between human KM resource and organizational performance.

As earlier stated, the result of the factor analysis conducted in the present study, shows that one dimension of knowledge management i.e. structural knowledge management had to be deleted. Thus, the hypothesis on the said dimension on mediation

was therefore deleted. Another difference between the restated hypothesis and the original hypothesis before factor analysis is that one dimension of the dependent variable was also deleted. Therefore, the hypothesis formulated on the said dimension was also deleted. Initially, the present study formulated a total number of five main hypotheses, with 116 sub-hypotheses based on the dimensional nature of the variables. After factor analysis, 54 sub-hypotheses were retained, as a result of the deletion of the dimensions not found suitable in the present study.

#### 5.8 RESULTS OF THE MAIN AND INTERACTION EFFECTS

The present section discusses the hypotheses testing related to the main effects of human resource practices on organizational performance, and the main effects of human resource practices on knowledge management. Additionally, it also explains the main effects of knowledge management on organizational performance. As previously mentioned, a bivariate correlation was conducted to understand the relationship between human resource practices, knowledge management, competitive strategies, and organizational performance. Multiple regression analysis was conducted to understand the main effect of human resource practices on organizational performance, and the main effect of human resource practices on knowledge management. Finally, the main effect of knowledge management on organizational performance was conducted.

A hierarchical multiple regression analysis was also conducted to understand the mediating effects of knowledge management on the relationship between human resource practices and organizational performance, and the moderating effects of competitive strategies on the relationship between knowledge management and organizational

performance. To test the study's hypotheses, the level of significance was set at p < .05 and p < .01 (Cooper & Schindler, 2003).

Before regression analysis can be run, at least four assumptions (normality, linearity, multicollinearity, and homoscedasticity) should be met, the result of which is as follows.

#### 5.8.1 Checking for Regression Assumptions

The first assumption that needs to be checked is **normality**. For most analyses to work correctly, data should follow a normal distribution. If normality exists, even in conditions that do not necessitate normality, it will make a stronger assessment (Hair et al., 2006). After having conducted the normality test for latent variables another test was used to check the data normality assumption of the regression model. This was a histogram of the distribution of the residuals and box plots. The histogram showed that the distribution approximated a normal curve, which met the normality assumption.

The second assumption pertains to linearity and homoscedasticity. A significant element of simple linear regression analysis is the determination of whether the basic assumption of linearity and homoscedasticity status are satisfied (Hair et al., 2006). The results of linearity were shown using scatter plot diagrams following the normality test of all the latent variables. No evidence of nonlinear patterns was present. In addition, the homoscedasticity test results presented through scatter plot diagram of standardized residuals indicated that the variance of dependent variable was similar for all values of the independent variable as no different pattern was discovered in the data point. Hence, the data had achieved homoscedasticity and linearity.

The third assumption involves checking for **multicollinearity**. According to Kline (1998), multicollinearity occurs when a high correlation between independent variables exists in a regression model. Two values are generally employed to check for multicollinearity namely tolerance and Variance Inflation Factor (VIF). The problem of multicollinearity is obvious if a tolerance value is less than .10 and/or a VIF value is above 10. Table 5.10 shows that the tolerance values were between .627 and .972, and the variance inflation factor (VIF) values were in the range of 1.028 to 1.594. As the tolerance value was more than .10 and the VIF less than 10, no issue of multicollinearity occurred. In addition to tolerance and VIF values, multicollinearity was also checked by considering the correlation values. As shown in Table 5.9 correlations between the variables had values less than .70 (Pallant, 2007), which means there was no multicollinearity amongst the variables.

Table 5.10

Testing for Multicollinearity on Assessment of Tolerance and VIF values

Variable **Tolerance** VIF Staffing .843 1.187 Training and development .835 1.198 Performance appraisal .643 1.554 Compensation .761 1.314 Job security .907 1.103 1.594 Employee participation and involvement .627 Technical KM resource .845 1.184 Cultural KM resource .772 1.296 .854 Human KM resource 1.171 .891 1.123 Cost leadership Marketing differentiation .804 1.244 Innovation differentiation .972 1.028

#### 5.8.2 Regression Results

The present section presents the results of regression analysis used for testing the hypotheses of the study. After factor analysis was done, 54 sub-hypotheses were formulated. Of these sub-hypotheses, 27 were related to the direct effect of the HRM practices on OP, and the direct of HRM practices on knowledge management, and also the direct effect of KM on OP. Meanwhile, 27 sub-hypotheses were related to the mediating effect of knowledge management on the relationship between HRM practices and OP, and the moderating effect of competitive strategies on the relationship between KM and OP.

# 5.8.2.1 Main Effect of Human Resource Management Practices on Organizational Performance

This section deals with the first hypothesis in the present study which predicts that six HRM practices (staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement) have positive relationship with OP. In regression analysis, absolute beta values were utilized to compare contribution of each dimension of HRM practices to the dependent variable (Pallant, 2007).

Table 5.11 shows that the model was generally significant (F = 8.93, Sig = .000). The results indicate that a value of  $R^2$  is .175, indicating that 17.5% of the variance in OP was explained significantly by a number of independent variables i.e. staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement. Specifically, staffing, training and development, and job security dimensions of human resource practices made unique significant contributions to

the prediction of organizational performance while the remaining dimensions i.e. performance appraisal, compensation, and employee participation and involvement did not make any significant effects. Based on the results, H1a, H1b, and H1e were supported, while H1c, H1d, and H1f were rejected.

Table 5.11
Result of Regression Analysis of HRP on Organizational Performance

Independent variables	Unstand	lardized beta	Standardized	t	Sig.
_	В	Std. error	beta		
(Constant)	1.71	.277		6.177	.000
Staffing	.170	.049	.215	3.462	.001
Training and development	.172	.050	.212	3.398	.001
Performance appraisal	070	.061	081	-1.138	.256
Compensation	006	.043	009	141	.888
Job security	3.162	.052	.188	3.127	.002
Employee participation and involvement	.066	.061	.077	1.070	.285

Note.  $R^2 = .175$ , F = 8.93, Sig. = .000

# 5.8.2.2 Main Effect of Human Resource Management Practices on Knowledge Management

The second hypotheses predict that six HRM practices (staffing, training and development, performance appraisal, compensation, job security, and employee KM management. To test these hypotheses, multiple regression analysis was carried out. Results are shown below.

#### 5.8.2.2.1 Human Resource Management Practices and Technical KM Resource

Table 5.12 provides evidence of the relationship between HRM practices and technical KM. Overall, results showed that the model was significant (F = 3.174, Sig = .005). The results showed a value of  $R^2$  at .070, indicating that 7% of the variance in technical KM resource was explained significantly by a number of independent variables i.e. staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement.

Table 5.12
Result of Regression Analysis of HRP with Technical KM Resource

Independent variables		dardized eta	Standardized beta	t	Sig.
	∞ B	Std. error			
(Constant)	2.61	.322		7.884	.000
Staffing	.115	ve <sup>.059</sup> ti	Utara Ma	1.953	.052
Training and development	.091	.060	.100	1.507	.133
Performance appraisal	.162	.074	.166	2.198	.029
Compensation	063	.051	085	-1.222	.233
Job security	065	.062	067	-1.052	.294
Employee participation and involvement	.010	.074	.010	.134	.893

Note.

$$R^2 = .070, F = 3.174, \text{Sig} = .005$$

Further analysis of the results in Table 5.12 showed that performance appraisal had the most significant contribution to the prediction of technical KM resource. The remaining

dimensions i.e. staffing, training and development, compensation, job security, and employee participation and involvement failed to make any significant effects. These results give support to H2c. However, H2a, H2b, H2d, H2e, and H2f were rejected.

#### 5.8.2.2.2 Human Resource Management Practices and Cultural KM Resource

Table 5.13 provides evidence on the relationship between resource practices and cultural knowledge management. Overall, result showed that the model was significant (F = 10.378, Sig = .000). The value of  $R^2$  was .198, indicating that 19.8% of the variance in cultural knowledge management resource was explained significantly by a number of independent variables i.e. staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement.

Table 5.13

Result of Regression Analysis of HRP with Cultural KM Resource

Independent variables		ndardized beta	Standardized beta	t	Sig.
	В	Std. error	-		
(Constant)	1.244	.319		3.896	.000
Staffing	.159	.057	.172	2.806	.005
Training and development	.001	.058	.001	.017	.987
Performance appraisal	.231	.071	.229	3.262	.001
Compensation	006	.049	008	130	.896
Job security	.134	.060	.133	2.241	.026
Employee participation and involvement	.132	.071	.132	1.861	.064

Note.

$$R^2 = .198, F = 10.378, \text{Sig} = .000$$

Table 5.13 reveals that only three dimensions of HRM practices influenced cultural KM, namely, staffing ( $\beta$  = .172, p = .005), performance appraisal ( $\beta$  = .229, p = .001), and job security ( $\beta$  = .133, p = .026). However, other three dimensions of HRM practices such as training and development, compensation, and employee participation and involvement failed to make any significant effects on cultural KM resource. Based on the results, H2g, H2i, and H2k were supported, while H2h, H2j, and H2l were rejected.

#### 5.8.2.2.3 Human Resource Management Practices and Human KM Resource

Table 5.14 provides evidence of the relationship between HRM practices and human KM. Overall, result showed that the model was significant (F = 8.946, Sig = .000). The value of  $R^2$  was .175, indicating that 17.5% of the variance in human KM resource was explained significantly by a number of independent variables i.e. staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement.

Table 5.14 reveals that only three dimensions of HRM practices influenced human KM, namely, staffing ( $\beta$  = .233, p = .001), training and development ( $\beta$  = .197, p= .002), and employee participation and involvement ( $\beta$  = .167, p = .021). The rest of HRM practices i.e. performance appraisal, compensation, and job security failed to make any significant effect on human KM resource. Based on the results, H2m, H2n, and H2r were supported, while H2o, H2p, and H2q were rejected.

Table 5.14
Result of Regression Analysis of HRP with Human KM Resource

Independent variables	Unstand be		Standardized beta	t	Sig.
	В	Std. error	•		
(Constant)	1.679	.305		5.511	.000
Staffing	.202	.054	.233	3.745	.000
Training and development	.175	.055	.197	3.152	.002
Performance appraisal	099	.068	104	-1.466	.144
Compensation	002	.047	002	032	.975
Job security	.079	.057	.083	1.387	.167
Employee participation and involvement	.157	.068	.167	2.322	.021

Note.

$$R^2 = .175$$
,  $F = 8.946$ , Sig = .000

#### 5.8.2.3 Knowledge Management and Organizational Performance

This section presents results regarding test of the third hypothesis (H3) which states that there is a positive relationship between KM and OP. Table 5.15 reveals statistical evidence of a significant relationship between KM and OP.

Table 5.15 shows that all the dimensions of KM were significantly related to OP. Specifically, human KM resource contributed the most ( $\beta$  = .288, p = .000), followed by cultural KM resource ( $\beta$  = .160, p = .013), and technical KM resource ( $\beta$  = .131, p = .032). In this study, all dimensions of KM made a unique and statistically significant contribution to the prediction of OP. Hence, H3a, H3b, and H3c were supported.

Table 5.15
Result of Regression Analysis of Knowledge Management with Organizational Performance

Independent variables	Unstandardized beta		Standardized beta	t	Sig.
	В	Std. error			
(Constant)	1.662	.238		6.973	.000
Technical KM resource	.116	.054	.131	2.151	.032
Cultural KM resource	.137	.055	.160	2.499	.013
Human KM resource	.262	.055	.288	4.739	.000

Note.

$$R^2 = .193, F = 20.428, \text{Sig} = .000$$

#### 5.8.3 Mediating Effects of Knowledge Management

The present section explores the mediating effect of KM on the relationship between HRM practices (staffing, training and development, performance appraisal, compensation, job security, and employee participation and involvement) and OP. Knowledge management was examined using three dimensions, namely, technical KM resource, cultural KM resource, and human KM resource. To examine the mediating effects of these dimensions on the relationship between HRM practices and OP, three hierarchical multiple regression analyses were conducted separately.

To establish a mediation effect, Baron and Kenny (1986) recommended a three-step procedure, as follows: (1) regressing the mediator on the independent variable; (2) regressing the dependent variable on the independent variable; and (3) regressing the dependent variable on the mediator and the independent variable. If the results are

significant in the first and second steps and become insignificant in the third step, a full mediation is confirmed. However, if the results are significant in the first and second steps and remain significant in the third step with the significant reduction of regression weight for beta coefficient, a partial mediation occurs. It is worth noting that certain HRM practices may differentially influence KM and consequently OP. Thus, in order to have an accurate estimation of the relationship between HRM practices and OP, the present study examined the mediating effects of each KM dimension with HRM practices and OP.

#### 5.8.3.1 Mediating Effect of Technical KM Resource

In order to examine the mediating influence of technical KM, a hierarchical regression following the steps suggested by Baron and Kenney (1986) in which all dimensions of HRM practices were entered as the independent variables and OP as the dependent variable, was run As portrayed in Table 5.16, the first model of the regression showed that the independent variables of staffing, training and development, and job security significantly contributed to OP ( $R^2 = .175$ , F = 8.932, Sig = .000). This result suggests that the independent variables significantly explained 17.5% of the total variance in OP. The significant result fulfils the second step in the mediating test, which means that the second step could be pursued. Then, in the second model, the predictor variables of HRM practices were regressed against technical KM. The model was also found to be significant ( $R^2 = .070$ , F = 3.174, Sig = .005). The last step involved running another regression in which HRM practices and technical KM were entered as independent variables, and OP as the

dependent variable. The model was also found to be significant ( $R^2 = .219$ , F = 10.098, Sig = .000).

Because the third model was found to be significant, the researcher proceeded with assessing the mediating effect of technical KM to see whether full or partial mediation was obtained. Then, the beta values in the first and the third models tested earlier (first and third step), i.e. with and without the mediating variable of technical KM were compared. As mediation can take place in two ways, i.e. either full or partial mediation, it was assessed by following Baron and Kenny's recommendation. Full mediation is said to occur when the significant relationship between the independent variables and the dependent variable is reduced and is not significant after the mediating variable enters the equation. On the other hand, the mediation is said to be partial mediation when the significant relationship is reduced but still significant.

As shown in Table 5.16, the strength of such relationships decreased for staffing ( $\beta$  = .187), and training and development ( $\beta$  = .191). According to Baron and Kenny (1986), when the beta value of the independent variable decreases after the inclusion of the mediating variable and the value is zero, the mediating variable is said to be a full mediator. In this case, the beta values for staffing, and training and development did decrease, but the relationships still remained significant. In this manner, it can be said that technical KM partially mediated the relationship between staffing, and training and development and OP. However, the strength of the relationship between employee participation and involvement and OP did decrease but it was not significant, suggesting that technical KM did not mediate.

Table 5.16
Result of Hierarchical Regression Analysis (HRM → Technical KM → OP)

Without mediator		With mediator		
Independent variables	Std. beta	Independent variables	Std. beta	
Staffing	.215**	Staffing	.187**	
Training and	.212**	Training and development	.191**	
development				
Performance appraisal	081	Performance appraisal	117	
Compensation	009	Compensation	.009	
Job security	.188**	Job security	.202**	
Employee participation and involvement	.077	Employee participation and involvement	.075	
		Technical KM	.218**	
$R^2$	.175	$R^2$	.219	
$Adj. R^2$	.155	Adj. $R^2$	.197	
F	8.932	F	10.098	
Sig.	.000	Sig.	.000	

Note.

On the other hand, the strength of the relationships between performance appraisal, compensation, and job security and OP did not decrease, suggesting that technical KM did not mediate. Thus, only H4a and H4b were supported.

#### 5.8.3.2 Mediating Effect of Cultural KM Resource

Similarly procedures were run to examine the mediating influence of cultural KM. As portrayed in Table 5.17, the first model of the regression showed that the independent variables of staffing, training and development, and job security significantly contributed to OP ( $R^2 = .175$ , F = 8.932, Sig = .000). This result suggests that the independent variables significantly explained 17.5% of the total variance in OP. The significant result fulfils the

<sup>\*</sup> p < .05, \*\* p < .01

second step in the mediating test. Then, in the second model, the HRM practices variables were regressed against cultural KM. The model was also found to be significant ( $R^2 = .198$ , F = 10.378, Sig = .000). In the last step HRM practices and cultural KM were entered as the independent variables, and OP as the dependent variable. The model was also found to be significant ( $R^2 = .218$ , F = 10.051, Sig = .000).

Table 5.17

Result of Hierarchical Regression Analysis (HRM → Cultural KM → OP)

Without mediator		With mediat	With mediator	
Independent variables	Std. beta	Independent variables	Std. beta	
Staffing	.215**	Staffing	.175**	
Training and	.212**	Training and development	.212**	
development				
Performance appraisal	081	Performance appraisal	134	
Compensation	009	Compensation	007	
Job security	.188**	Job security	.157**	
Employee participation	.077	Employee participation and	.046	
and involvement	//-/	involvement		
BUDI BA	Unive	rsi Cultural KM Malaysia	.233**	
$R^2$	.175	$R^2$	.218	
Adj. $R^2$	.155	Adj. $R^2$	.197	
F	8.932	F	10.051	
Sig.	.000	Sig.	.000	

Note.

The researcher then proceeded with assessing the mediating effect of cultural KM to see whether full or partial mediation was obtained. As shown in Table 5.17, the strength of the relationships decreased for staffing ( $\beta = .175$ ), and job security ( $\beta = .157$ ), after cultural KM was included. Hence, cultural KM partially mediated the relationship between staffing and job security and OP. In case of compensation, and employee participation and

<sup>\*</sup> p < .05, \*\* p < .01

involvement, the strength of the relationship between compensation, and employee participation and involvement and organizational performance did decrease but it was not significant. This suggests that cultural KM did not mediate.

On the other hand, the strength of the relationship between training and development, and performance appraisal and OP did not decrease, suggesting that cultural KM did not mediate the relationship. Hence, only H4g and H4k were supported.

#### 5.8.3.3 Mediating Effect of Human KM Resource

Similar procedure was run to examine the mediating influence of human KM. As portrayed in Table 5.18, the first model of the regression showed that the independent variables of staffing, training and development, and job security significantly contributed to OP ( $R^2 = .175$ , F = 8.932, Sig = .000). This result suggests that the independent variables significantly explained 17.5% of the total variance in OP. Then, in the second model, the predictor variables of HRM practices were regressed against human KM. The model was also found to be significant ( $R^2 = .175$ , F = 8.946, Sig = .000). The last step involved running another regression in which HRM practices and human KM were entered as the independent variables, and OP as the dependent variable. The model was also found to be significant ( $R^2 = .228$ , F = 10.663, Sig = .000).

Then, the mediating effect of human KM was assessed to see whether full or partial mediation was obtained. As shown in Table 5.18, the strength of such relationships decreased for staffing ( $\beta = .156$ ), training and development ( $\beta = .162$ ), and job security ( $\beta = .166$ ) after the inclusion of human KM. The beta values for staffing, training and development, and job security did decrease, but the relationships still remained significant.

Hence, human KM partially mediated the relationship between staffing, training and development, and job security OP.

However, the strength of the relationship between performance appraisal, and employee participation and involvement and OP did decrease but it was not significant in predicting OP when tested without the mediator, suggesting that human KM did not mediate. In addition, the strength of the relationship between compensation and OP did not decrease, suggesting that human KM did not mediate the relationship between compensation and OP. Hence, only H4m, H4n, and H4q were supported.

Table 5.18

Result of Hierarchical Regression Analysis (HRM  $\rightarrow$  Human KM  $\rightarrow$  OP)

Without mediator		With mediate	With mediator		
Independent variables	Std. beta	Independent variables	Std. Beta		
Staffing	.215**	Staffing	.156*		
Training and	.212**	Training and development	.162**		
development	//-/				
Performance appraisal	081Unive	Performance appraisal / S a	055		
Compensation	009	Compensation	009		
Job security	.188**	Job security	.166**		
Employee participation	.077	Employee participation and	.035		
and involvement		involvement			
		Human KM	.254**		
$R^2$	.175	$R^2$	.228		
Adj. $R^2$	.155	Adj. $R^2$	.207		
F	8.932	F	10.633		
Sig.	.000	Sig.	.000		

Note.

<sup>\*</sup> p < .05, \*\* p < .01

#### 5.8.4 Moderating Effects of Competitive Strategies

This section presents the results on the interacting effects between competitive strategies and KM dimensions (technical KM resource, cultural KM resource, and human KM resource) on OP. The moderated regression technique developed by Baron and Kenny (1986), and Sharma, Durand, and Gur-Arie (1981) were used to test the hypotheses. This technique involves a three-step hierarchical regression to be applied to each moderator. In the first step, the independent variable was entered, followed by the moderating variable. In the third step, the interaction terms were introduced into the equation to test the joint effect of the predictor and the moderator on the dependent variable. The interaction terms were computed by multiplying the predictor with the moderating variables.

To demonstrate if the moderator effect was present on the proposed relationship, three maximum conditions were used. First, the final model was significant. Second, the F change was significant. Third, multiplicative interaction term was also statistically significant. Additionally, in order to establish whether a moderator is a pure or a quasi-moderator, the researcher applied the criteria proposed by Sharma et al. (1981) which state that if the coefficient of the multiplicative interaction term is significant and the coefficient of the moderator variable is not significant, then the moderator is considered to be a pure moderator. On the other hand, if the coefficients of the multiplicative interaction term as well as the moderator variable are significant, then the moderator is considered to be a quasi-moderator. The following three subsections show the analyses of the three competitive strategies dimensions, and a summary of each moderator's effect is presented in each analysis.

#### 5.8.4.1 Moderating Effect of Cost Leadership

Hypotheses 5a, 5b, and 5c predicted that cost leadership moderates the relationship between the three dimensions of KM and OP. The analysis started with testing the moderating effect of cost leadership on the relationship between KM and OP. Result is as shown in Table 5.19.

Table 5.19
Cost leadership as a Moderator in the Relationship between KM and OP

Variables	Std. beta	Std. beta	Std. beta
	Step1	Step 2	Step 3
Independent variable			
Technical KM resource (TKR)	.131*	.147*	318
Cultural KM resource (CKR)	.160*	.157*	.687*
Human KM resource (HKR)	.288**	.307**	504
Moderating variable			
Cost leadership (CL)		079	-1.060*
Interaction terms			
TKR*CL			.844
CKR*CL Univ	versiti Utara	Malays	900
HKR*CL			1.491**
$R^2$	.193	.199	.232
Adj. $R^2$	.184	.186	.211
R <sup>2</sup> change	.193	.006	.033
Sig F change	.000	.184	.014

Note.

The set of KM dimensions entered at step 1 accounted for approximately 19.3% of the variance in OP. Technical KM ( $\beta$  = .131, t = 2.151, p = .05) and cultural KM ( $\beta$  = .160, t = 2.499, p = .05) and human KM ( $\beta$  = .288, t = 4.739, p = .01) had significant main effects on OP. The relationships for all dimensions of KM were positive. The moderator variable entered at step 2 accounted for approximately 19.9% of the variance in OP. But,

p < .05, \*\*p < .01

cost leadership was not significantly related to OP. At step 3, when the interaction terms were entered, an increase in  $R^2$  by 3.3% was observed. However, only one interaction was significant. The interaction term was between cost leadership \* human KM ( $\beta = 1.491$ , t = 2.889, p = .01). In other words, the results showed that cost leadership quasi moderated the relationship between human KM and OP, indicating that only H5c was supported.

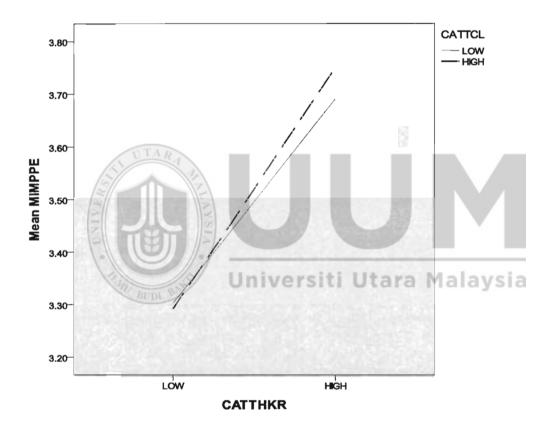


Figure 5.1
Plot of interaction between human KM and cost leadership on OP
Note.
MIMPPE = OP; CATTHKR = Human KM; CATTCL = Cost leadership

As indicated in Table 5.19, cost leadership significantly moderated the relationship between human KM and OP. Figure 5.1 shows that the relationship between human KM and OP was strongest in the case of low cost leadership and weakest in the case of high

cost leadership. In other words, high human KM enhances OP more when the organization pursues high levels of cost leadership than if it is to implement low levels of cost leadership.

#### 5.8.4.2 Moderating Effect of Marketing Differentiation

Hypotheses 5d, 5e, and 5f predicted that marketing differentiation moderates the relationship between the three dimensions of KM and OP. Result is shown in Table 5.20.

Table 5.20

Marketing Differentiation as a Moderator in the Relationship between KM and OP

Variables	Std. beta	Std. beta	Std. beta
	Step1	Step 2	Step 3
Independent variable			
Technical KM resource (TKR)	.131*	.114	.101
Cultural KM resource (CKR)	.160*	.120	.583
Human KM resource (HKR)	.288**	.234**	802**
Moderating variable	ersiti Ütara	malays	Id
Marketing differentiation (MD)		.194**	443
Interaction terms			
TKR*MD			.050
CKR*MD			749
HKR*MD			1.743**
$R^2$	.193	.223	.254
Adj. $R^2$	.184	.211	.233
$R^2$ change	.193	.030	.030
Sig F change	.000	.002	.019

Note.

The set of knowledge management dimensions entered at step 1 accounted for approximately 19.3% of the variance in OP. Technical KM ( $\beta$  = .131, t = 2.151, p = .05), cultural KM ( $\beta$  = .160, t = 2.499, p = .05) and human KM ( $\beta$  = .288, t = 4.739, p = .01) had

p < .05, \*p < .01

significant main effects on OP. The relationships for all dimensions of KM were positive. The moderator variable entered at step 2 accounted for approximately 22.3% of the variance in OP. Marketing differentiation was significantly related to OP. At step 3, when the interaction terms were entered, an increase in  $R^2$  by 3% was observed. However, only one interaction was significant. The interaction term was between marketing differentiation \* human KM ( $\beta = 1.743$ , t = 3.108, p = .01). In other words, the results showed that the marketing differentiation purely moderated the relationship between human KM and OP, supporting only H5f.

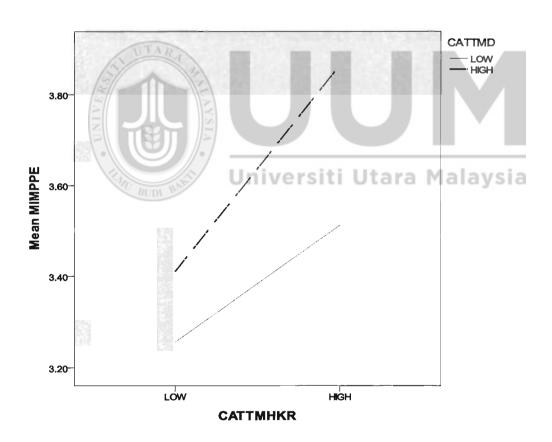


Figure 5.2
Plot of interaction between human KM and marketing differentiation on OP
Note.
MIMPPE = OP; CATTMHKR = Human KM; CATTMD = Marketing differentiation

Figure 5.2 shows that the relationship between human KM and OP was strongest in the case of low marketing differentiation and weakest in the case of high marketing differentiation. In other words, human KM enhances OP more when organizations implement higher levels of marketing differentiation than those implementing lower levels of marketing differentiation.

#### 5.8.4.3 Moderating Effect of Innovation Differentiation

Hypotheses 5g, 5h, and 5i predicted that innovation differentiation moderates the relationship between the three dimensions of KM and OP. Result is shown in Table 5.21.

Table 5.21
Innovation Differentiation as a Moderator in the Relationship between KM and OP

Variables	Std. beta	Std. beta	Std. beta
	Step1	Step 2	Step 3
Independent variable			
Technical KM resource (TKR)	.131*	.131	047
Cultural KM resource (CKR)	ersiti U.160*	Mal <sub>158</sub> /si	178
Human KM resource (HKR)	.288**	.289**	.968**
Moderating variable			
Marketing differentiation (ID)		.010	.207
Interaction terms			
TKR*ID			.313
CKR*ID			.523
HKR*ID			-1.023*
$R^2$	.193	.193	.209
Adj. $R^2$	.184	.181	.187
R <sup>2</sup> change	.193	.000	.016
Sig F change	.000	.864	.171

Note. \*p < .05, \*\*p < .01

The set of KM dimensions entered at step 1 accounted for approximately 19.3% of the variance in OP. Technical KM ( $\beta$  = .131, t = 2.151, p = .05), cultural KM ( $\beta$  = .160, t =

2.499, p = .05), and human KM ( $\beta$  = .288, t = 4.739, p = .01) had significant main effects on OP. The relationships for all dimensions of KM were positive. The moderator variable entered at step 2 accounted for approximately 19.3% of the variance in OP but innovation differentiation was not significantly related to OP. In step 3, when the interaction terms were entered, an increase in  $R^2$  by 1.6% was observed. However, only one interaction was significant, which was between innovation differentiation \* human KM ( $\beta$  = -1.023, t = -2.087, p = .05). In other words, the results showed that innovation differentiation purely moderated the relationship between human KM and OP, hence, supporting only H5i.

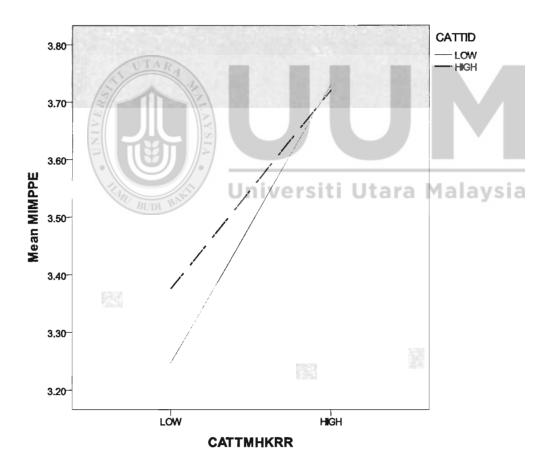


Figure 5.3
Plot of interaction between human KM and innovation differentiation on OP
MIMPPE = OP; CATTMHKRR = Human KM; CATTID = Innovation differentiation

Figure 5.3 shows that the relationship between human KM and OP is strongest in the case of high innovation differentiation and weakest in the case of low innovation differentiation. In other words, under conditions of high innovation differentiation, organizations with human KM reported significantly better performance than those implementing low levels of innovation differentiation.

Table 5.22 summarizes the results of the hypotheses tested in this study.

Table 5.22
Summary of Result of Hypotheses Testing

Hypothesis	Statement of hypotheses	Result
Hla:	Staffing is positively related to organizational	Supported
	performance.	
H1b:	Training and development is positively related to	Supported
(3)	organizational performance.	
H1c:	Performance appraisal is positively related to	Rejected
E	organizational performance.	
H1d:	Compensation is positively related to organizational	Rejected
771	performance.	0 . 1
H1e:	Job security is positively related to organizational performance.	Supported
H1f:	Employee participation and involvement is positively	Rejected
	related to organizational performance.	
H2a:	Staffing is positively related to technical KM resource.	Rejected
H2b:	Training and development is positively related to technical	Rejected
	KM resource.	
H2c:	Performance appraisal is positively related to technical	Supported
	KM resource.	
H2d:	Compensation is positively related to technical KM	Rejected
710	resource.	D 1 4 1
H2e:	Job security is positively related to technical KM resource.	Rejected
H2f:	Employee participation and involvement is positively related to technical KM resource.	Rejected
	Totaled to teelimeat IXIVI resource.	
H2g:	Staffing is positively related to cultural KM resource.	Supported
H2h:	Training and development is positively related to cultural	Rejected
	KM resource.	5
H2i:	Performance appraisal is positively related to cultural KM	Supported
	resource.	

Н2ј:	Compensation is positively related to cultural KM resource.	Rejected
H2k: H2L:	Job security is positively related to cultural KM resource. Employee participation and involvement is positively related to cultural KM resource.	Supported Rejected
H2m: H2n:	Staffing is positively related to human KM resource.  Training and development is positively related to human KM resource.	Supported Supported
H2o:	Performance appraisal is positively related to human KM resource.	Rejected
H2p:	Compensation is positively related to human KM resource.	Rejected
H2q:	Job security is positively related to human KM resource.	Rejected
H2r:	Employee participation and involvement is positively related to human KM resource.	Supported
Н3а:	Technical KM resource is positively related to organizational performance.	Supported
H3b:	Cultural KM resource is positively related to	Supported
/2	organizational performance.	
Н3с:	Human KM resource is positively related to organizational performance.	Supported
H4a:	Technical KM resource mediates the relationship between staffing and organizational performance.	Supported
H4b:	Technical KM resource mediates the relationship between training and development and organizational performance.	Supported
H4c:	Technical KM resource mediates the relationship between performance appraisal and organizational performance.	Rejected
H4d:	Technical KM resource mediates the relationship between compensation and organizational performance.	Rejected
H4e:	Technical KM resource mediates the relationship between job security and organizational performance.	Rejected
H4f:	Technical KM resource mediates the relationship between employee participation and involvement and organizational performance.	Rejected
H4g:	Cultural KM resource mediates the relationship between staffing and organizational performance.	Supported
H4h:	Cultural KM resource mediates the relationship between training and development and organizational performance.	Rejected
H4i:	Cultural KM resource mediates the relationship between performance appraisal and organizational performance.	Rejected
Н4ј:	Cultural KM resource mediates the relationship between compensation and organizational performance.	Rejected
H4k:	Cultural KM resource mediates the relationship between	Supported

H4L:	job security and organizational performance. Cultural KM resource mediates the relationship between employee participation and involvement and organizational performance.	Rejected
H4m:	Human KM resource mediates the relationship between staffing and organizational performance.	Supported
H4n:	Human KM resource mediates the relationship between training and development and organizational performance.	Supported
H4o:	Human KM resource mediates the relationship between performance appraisal and organizational performance.	Rejected
H4p:	Human KM resource mediates the relationship between compensation and organizational performance.	Rejected
H4q:	Human KM resource mediates the relationship between job security and organizational performance.	Supported
H4r:	Human KM resource mediates the relationship between employee participation and involvement and organizational performance.	Rejected
H5a:	Cost leadership moderates the relationship between technical KM resource and organizational performance.	Rejected
H5b:	Cost leadership moderates the relationship between cultural KM resource and organizational performance.	Rejected
H5c:	Cost leadership moderates the relationship between human KM resource and organizational performance.	Supported
H5d:	Marketing differentiation moderates the relationship between technical KM resource and organizational performance.	Rejected
H5e:	Marketing differentiation moderates the relationship between cultural KM resource and organizational performance.	Rejected
H5f:	Marketing differentiation moderates the relationship between human KM resource and organizational performance.	Supported
H5g:	Innovation differentiation moderates the relationship between technical KM resource and organizational performance.	Rejected
H5h:	Innovation differentiation moderates the relationship between cultural KM resource and organizational performance.	Rejected
H5i:	Innovation differentiation moderates the relationship between human KM resource and organizational performance.	Supported

#### 5.9 SUMMARY

This chapter presented the results of analysis on quantitative data collected from Jordanian services organizations. The data were analysed using various statistical analysis techniques. Firstly, response rate test was presented followed by the validity and reliability test on the items used to measure the study variables. Then, descriptive analyses were run to identify the characteristics of responding firms and participants, and all variables under study. Bivariate correlations were also conducted to identify interrelationships among all the study variables. Next, multiple regression analyses provided partial support for the relationship between HRM practices and OP and partial support for the relationship between HRM practices and KM, as well as full support for the relationship between KM and OP. Finally, hierarchal multiple regression was conducted to examine the effect of KM in mediating the relationship between HRM practices and OP, and the effect of competitive strategies in moderating the relationship between KM and OP. KM was shown to mediate the relationship between HRM practices and OP. It was further revealed that competitive strategies generally significantly moderated between KM and OP. The final chapter will discuss the findings, followed by managerial and theoretical implications, suggestions for future research, statement of limitations, and the conclusion of this study.

#### **CHAPTER SIX**

#### DISCUSSIONS, IMPLICATIONS AND CONCLUSIONS

#### 6.0 INTRODUCTION

In the previous chapter, findings of the present study were presented based on the data collected amongst general managers at service organizations in Jordan. Specifically, the previous chapter described the background of the participants and presented the descriptive results of the main variables, the intercorrelations between the variables, and most importantly the results of the hypotheses testing. In this chapter, the findings are discussed in detail by relating them to the underpinning theories of resource based view, contingency theory and previous works.

Toward this end, this chapter is organized as follows: First, it summarizes the findings. Then, it discusses the findings of each research hypothesis. Next, it proceeds by highlighting the implications of the findings for practice. In addition, limitations and future research of study are outlined. Finally, this chapter ends with some concluding remarks.

#### 6.1 SUMMARY OF THE FINDINGS

The main objective of the present study was to examine the relationship between human resource practices and organizational performance in the service sector in Jordan. Specifically, the study examined: (1) the direct relationship between HRM practices and OP; (2) the direct relationship between HRM practices and KM; (3) the direct relationship between KM and OP; (4) the mediating effects of KM on the relationship between HRM

practices and OP; and (5) the moderating effect of competitive strategies on the relationship between KM and OP. In achieving the research objectives, a survey in service organizations in Jordan was carried out.

This study has filled the gaps in the HRM practices and OP literature. Previous research has provided mixed results on the relationship between the two; some studies found significant relationships while others found non-significant ones. In addition, the majority of previous research has attempted to examine the direct relationships between HRM practices and OP. The present study differed from the past by examining a multidisciplinary model of HRM practices and OP with the consideration of the mediation of KM and the moderation of competitive strategies. In doing so, the present study integrated resource-based view and contingency theory.

The empirical findings emerged from this study provide a general support for the hypothesized research model and the relationships among its constructs. Specifically, HRM practices tend to enhance OP because such practices promote the development of an environment in which employees learn new sets of skills, use them to interact and share with others, and develop values for the accomplishment of work performance (i.e. KM). Such practices tend to further enhance organizational performance when they are implemented to fit the business strategies. The general support for the research model also confirms the theoretical propositions of resource-based view and contingency theory in explaining OP.

However, some of the hypothesized relationships were not found to show any statistically significant effect. Four out of six dimensions of HRM practices (i.e. staffing, training and development, job security and employee participation and involvement) were found to have positive and significant effects on organizational performance. However, performance appraisal and compensation did not show any statistically significant effect. In the same vein, different HRM practices showed different effects on different dimensions of KM. For instance, performance appraisal was the only dimension that significantly affected technical KM; meanwhile staffing, training and development, and employee participation and involvement were found to have a significant effect on human KM. Also, staffing, performance appraisal and job security significantly affected cultural KM.

With regards to the mediating role of KM, the overall findings suggest that the effect of HRM practices on OP occurred because such practices promoted the development of an environment in which employees disseminate, share and communicate knowledge. However, it appears that some types of HRM practices tended to encourage different KM activities. For instance, while staffing and training and development encouraged technical KM (how knowledge travels and accessed), staffing and job security enhanced cultural KM (use of knowledge to develop values). It was also found that staffing, training and development, and job security promoted the development of an environment in which employees interact with each other to share their specialized skills (human KM). Results also demonstrated an overall support for the moderating role of competitive strategies on KM and OP, suggesting that proper alignment between KM and business strategy has bearing on increased OP.

The next section discusses the results in greater detail by answering the research questions and addressing the research objectives set earlier.

#### 6.2 DISCUSSION OF THE RESEARCH FINDINGS

### 6.2.1 Relationship between Human Resource Management Practices and Organizational Performance

Results of the present study lend further support to the literature on the effect of HRM practices on OP (e.g., Abdalkrim, 2012; Boohene & Asuinura, 2011; Fening & Amaria, 2011; Khan, 2010; Moideenkutty et al., 2011; Nayyab et al., 2011). However, upon closer examination, not all HRM practices were found to have significant effect on OP. Of six HRM practices, only three showed a positive influence on OP. They were staffing, training and development, and job security. No significant effect was observed of performance appraisal, compensation, and employee involvement and participation.

#### 6.2.1.1 The Positive Role of Staffing, Training and Development, and Job Security

Result found a positive relationship between staffing and OP, as expected. The present result is thus in line with previous findings (e.g., Chand & Katou, 2007; Huang, 2000; Khan, 2010; Moideenkutty et al., 2011). The present finding is also consistent with previous works conducted within the Jordanian service sector. For instance, Khasawneh and Alzawahreh (2012) found staffing to be positively related to OP. In a different study, Rawashdeh and Al-Adwan (2012) observed a positive relationship between staffing and OP in Jordanian commercial banks. Similarly, Alkalha, Al-Zubi, Al-Dmour, Alshurideh, and Masadeh (2012) in a study conducted in commercial banks in Jordan found recruitment and selection practice to be positively related to OP.

The positive relationship between staffing and OP lends support to the theoretical proposition by Huselid (1995) who contended that recruitment procedures providing an

expansive pool of applicants, coupled with a reliable and valid employment selection, will significantly contribute to organizational performance. By employing the right candidates with the necessary skills in terms of quality and type, the organization is able to benefit as reflected in enhanced performance because such employees will be able to accomplish tasks and responsibilities effectively as expected of them. In other words, the use of an effective selection method will maximize the probability of the suitable person's selection to fill the vacancy, and when this happens, productivity increases (Robbins, 1991).

As expected, a positive relationship between training and development and OP was found.

Other studies have also found similar result in that comprehensive training and development programs were positively related to staff retention, productivity, and organizational effectiveness (Abdalkrim, 2012; Aragon-Sanchez et al., 2003; Khan, 2010; Lo et al., 2009; Tzafrir, 2006). The finding also lends further support to previous studies conducted in the Jordanian service sector. Alkalha et al. (2012) in a study conducted in commercial banks operating in Jordan found training and development to be positively related to OP. Similarly, Altarawneh (2005) demonstrated that training and development was positively related to OP in Jordanian banking organizations. Khasawneh and Alzawahreh (2012) also found that training and development was positively related to OP.

Training and development is a concept that is described as any effort provided to enhance the current and future skills, knowledge and abilities of workers in order for them to remain effective (Aswathappa, 2008) and achieve effective performance through high productivity (Apospori et al., 2008; King-Kauanui et al., 2006). Training and development have important contributions to organizational performance in the labor intensive service sector. It can help service organizations to reduce the risk and cost of selecting, hiring and

internalizing people from external labor markets, all of which can enhance employee productivity and increase the performance of the service organizations and promote their reputation by improved service (Firdousi, 2010).

In addition to staffing and training and development, job security practice was found to positively influence OP. The result is consistent with previous studies that reported similar findings (e.g., Abdullah et al., 2009; Joseph & Dai, 2009; Lee & Lee, 2007; Tsai, 2006). For example, Abdullah et al. (2009) that job security had a positive significant influence on OP in organizations in Malaysia. Similarly, Guest et al. (2003) observed a positive and statistically significant relationship between job security and OP in companies in the UK. Tsai (2006) also found job security and OP to be positively related. Similar result was reported by Joseph and Dai (2009).

Pfeffer (1998) argued that job security is important for a number of reasons. Firstly, employees are unlikely to agree to increase their flexibility and cooperation in becoming more efficient and productive if there is not some assurance that they will not lose their jobs. Secondly, providing job security is a form of discipline for the managers as it encourages considerable caution and care during recruitment and selection process (McKenna & Beech, 2002). In other words, promise of job security is a form of motivation that will result in greater employee commitment and a more productive work environment.

Staffing, training and development, and job security are particularly important in the Jordanian service sector in comparison to other practices such as performance appraisal, compensation, and employee involvement and participation. This is because by the Jordanian service sector puts emphasis on hiring the right person for the right job toward the accomplishment of the organizational performance (Rawashdeh & Al-Adwan, 2012).

Furthermore, staffing in service organization is a serious business for human resources managers. This is because the success of any organization and efficiency in service delivery depends on the quality of its workforce hired into the organization (Rawashdeh & Al-Adwan, 2012). Many researchers showed that staffing is very important in the service sector in Jordan (e.g., Alkalha et al., 2012; Khasawneh & Alzawahreh, 2012; Rawashdeh & Al-Adwan, 2012).

Also, training and development plays a vital role in the success of organizations in the service sector because trained personnel can improve service delivery (Altarawneh, 2005). In Jordan, training and development has been given much allocation by the service sector, signaling the importance of this aspect toward business success (Khasawneh & Alzawahreh, 2012). Due to high unemployment rate in Jordan, recorded at 12.3 % (Department of Statistics, 2014), job security is an important issue for everyone. Job security signals stability for the employees, which fosters commitment and professionalism in their work and hence organizational performance and success (Altarawneh & Aldehayyat, 2011).

In sum, it is well documented in the service management literature that services have unique characteristics which create several challenges for today's service businesses and services are labor intensive (Rawashdeh & Al-Adwan, 2012). Therefore, service organizations require high quality of human resources and HR practices in order to provide high quality of services to their customers which, in turn, affect organizational performance. Staffing service businesses processes with the right employees who have relevant competencies and skills and building their capacity through proper training and development enhance the professional practice of HRM and improve organizational

performance (Alkalha et al., 2012). Further, lower employees turnover is an essential for today's service organizations to build long term relationships with customers on the long term. Therefore, lower employees turnover is linked with higher job security; employees who feel secure at work tend to stay with their organizations, become more loyal and service customers well which all lead to improved organizational performance (Altarawneh & Aldehayyat, 2011). The right HRM inputs (Staffing, training and development, and job security) lead to the right business practices and then improved organizational performance.

## 6.2.1.2 The Non-significant Role of Performance Appraisal, Compensation, and Employee Involvement and Participation

Contrary to expectation, no significant effect was found of performance appraisal, compensation, and employee involvement and participation on OP. The non-significant effect of performance appraisal is, however, in line with previous findings (e.g., Lo et al., 2009). Also, the non-significant effect of compensation is consistent with previous studies that reported similar findings (e.g., Abdullah, Ahsan, & Alam, 2009; Boohene & Asuinura, 2011; Lee & Lee, 2007). For example, Abdullah et al. (2009) conducted a study to examine HRM practices and OP in private companies in Malaysia. They demonstrated that compensation did not correlate with better OP. Similarly, Boohene and Asuinura (2011) revealed that compensation did not have significant correlation with OP. In the same vein, Lee and Lee (2007) found that compensation had no effect on OP. In Jordan, Al-Qadi (2012) found that the compensation system is not effective in the Jordanian private universities. Also unexpectedly, employee involvement and participation did not show any

significant effect on OP. The non-significant finding is parallel with findings of previous studies (e.g., Al-Qadi, 2012; Lee & Lee, 2007).

The non-significant effect of performance appraisal, compensation, and employee involvement and participation on organizational performance is due to the fact that such practices are relatively speaking weak amongst service organizations in Jordan. Also, the three HRM practices have not received much attention by the top managements of service organizations in Jordan since HRM investment level is still small and the turnover of employees is high. Further, another potential explanation for such results is that there are many service organizations that are still practicing "personal management,, rather than HRM practices as well as lacking the strategic dimension of HRM. For instance, the involvement and participation of employees is still weak due to the centralized management approach that still dominates the organizational culture in many service organizations (Al-Qadi, 2012). Meanwhile, compensation is weak since service organizations have high level of employees' turnover and the short-term mentality is the dominant part of HRM practices. Finally, the human resources appraisal is still in its preliminary phase since there is some subjectivity in evaluating employees' performance and the methods of appraisal are not well-developed (Al-Qadi, 2012).

# 6.2.2 Relationship between Human Resource Management Practices and Knowledge Management

Three dimensions of KM were observed to be affected by HRM practices. They were human KM, cultural KM, and technical KM. When specific dimensions of HRM practices and KM management were considered, the findings appear to be mixed. While staffing,

training, and employee participation and involvement were found to significantly enhance human KM, staffing, performance appraisal, and job security appeared to influence significantly cultural KM. However, only performance appraisal was found to affect significantly technical KM. Taken together, the result seemed to indicate the differential effects of HRM practices on different types of KM. On this note, the finding seems to be inconsistent with Collins and Clark (2003), who revealed a positive effect of HRM resource practices on KM.

#### 6.2.2.1 HRM Practices and Human Knowledge Management

Human KM is defined as the extent to which employees specialize in a particular domain and demonstrate the capability of applying that knowledge to interact with others (Zhou & Fink, 2003). Result indicated that staffing, training and development, and employee participation and involvement were statistically significant in predicting human KM. This result means that human capital, with their knowledge, expertise, and skills, is a valuable resource of organizations. Organizations that effectively manage and leverage the knowledge and expertise embedded in individual minds will be able to create more value and achieve superior competitive advantage (Chen & Huang, 2009). However, employees are often unwilling or unable to share their knowledge and expertise with others because of self-interests and lack of trust. Accordingly, it is important for firms to harness the involvement and participation of employees through knowledge management.

HRM practices are the primary approaches to elicit and reinforce employees' knowledge and expertise that an organization requires (Currie & Kerrin, 2003). Since people are carriers of much of organization-specific knowledge and expertise, firms may

practices, such as staffing, training and development, and participation, are related to enhancing commitment, lowering turnover, and increasing performance through their impact on employee development and motivation (Guthrie, 2001). Organizations can use these practices to provide employees with the skills, resources, and discretion that they need to develop KM. Specifically, an effective staffing system can help organizations select and hire competent and qualified workforce to do the required tasks (Currie & Kerrin, 2003) and helps an organization to integrate knowledge from diverse sources to generate new and innovative ideas (Scarbrough, 2003) toward the development of competitive advantage. In addition, training programs could facilitate expertise and experience sharing, acquisition of new knowledge, and utilization of knowledge learned (Chen & Huang, 2009). The programs also play a critical role in developing a learningoriented organizational culture (Chen & Huang, 2009). Participation and involvement may attract employees to positively involve and contribute in KM and learning activities. Individuals having wider skills, expertise, and work responsibilities should give greater autonomy and self-regulation to do their work. Granting more discretion and participation in decision making can increase employees' involvement, awareness, and commitment. If employees have more opportunities to provide inputs and determine the required actions, they may increase the diversity and richness of knowledge exchange and bring more new ideas thereby facilitating the discovery and utilization of dispersed knowledge and expertise in the organization.

#### 6.2.2.2 HRM Practices and Cultural Knowledge Management

Result indicated that staffing, performance appraisal, and job security were significant predictors of cultural KM. Cultural knowledge management is about using the knowledge to develop shared values (Zhou & Fink, 2003). Shared values are also the identity by which the organization is known throughout its business areas.

Staffing enhances cultural KM not only because the correct people will help the organization create a community of shared values where the values can specifically include the importance of learning and developing more knowledge (Cabrera & Cabrera, 2005). Performance appraisal can also lead to enhanced cultural KM by building in elements of KM within the appraisal system (Cabrera & Cabrera, 2005). Previous studies (e.g., Cabrera & Cabrera, 2005; Currie & Kerrin, 2003) suggested that the performance appraisal activity could be enhanced through the organizational knowledge management initiative. Job security leads to enhanced cultural KM because it reduces the anxiety associated with losing one's place within an organization (Michailova & Husted, 2003). This enables knowledge sharing to occur more frequently. Therefore, if the employees perceive that their position within the organization will not be jeopardized due to the dissemination of knowledge throughout the organization they would be more willing to share knowledge with others (Michailova & Husted, 2003).

Meanwhile, training and development, compensation, and employee participation and involvement had no significant influence on cultural KM. These findings are realistic since there is a weak practice of training, compensation, and employee participation and involvement in service organizations in Jordan (Maddan, 2009), which would not lead to any significant cultural KM. But the insignificant influence of training, compensation, and

employee participation contradicts scholarly arguments on the important role of these practices in enhancing KM practices (e.g., Andrews & Kacmar, 2001; Argote et al., 2003; Collins & Clark, 2003; Nonaka, 1994; Scarbrough, 2003). This results could be interpreted from the system adopted by services organizations in Jordan which still needs some improvements especially for the employees in the lower level, which receive little attention, and may lack the acknowledgment for their role in the organizations.

#### 6.2.2.3 HRM Practices and Technical Knowledge Management

Technical KM is defined as the technical systems within an organization that determine how knowledge travels throughout the enterprise and how knowledge is accessed (Zhou & Fink, 2003). In the present study, only performance appraisal was found to be a significant determinant of technical KM. The result provides evidence that performance appraisal is able to enhance knowledge sharing behavior of employees. Performance appraisals are one of the primary HRM practices that firms can use to reinforce employees' behaviors and induce them to comply with organizational goals (Collins & Clark, 2003). In terms of performance appraisal, if firms want to elicit desired behaviors from employees, they must provide feedback and incentives that reinforce the desired behaviors (Collins & Clark, 2003).

Contrary to expectations, staffing, training and development, compensation, employee participation and involvement, and job security had no significant impact on technical KM. This may reflect the situation in the service sector itself. Service organization may not need a high level of technical knowledge or it could be restricted to certain departments. In other words, such organizations may not need high technology for

performing the tasks needed, or the service organizations are unwilling to invest in this sector, or they may depend on external expertise for performing such tasks, who do not belong to human resources departments (Maddan, 2009). Furthermore, these findings may be limited to Jordan's service sector since the overall practice of human resources management in this country is generally weak and dominated by high level of centralization (Gantasala et al., 2010).

### 6.2.3 Relationship between Knowledge Management and Organizational Performance

As expected, empirical support for the hypothesis that KM is related to OP was found. This means the application of KM within the organization facilitates superior decision making, and maximizes productivity and profitability (Edvardsson, 2008). The present finding appears to be consistent with previous studies that revealed KM to be a crucial factor in acquiring and sustaining competitive advantage (e.g., Anantatmula, 2007; Boumarafi & Jabnoun, 2008; Hsiao, Chen, & Chang, 2011; Zack et al., 2009). Chinowsky and Carrillo (2007) revealed that KM is critical in the current business environment that requires continuous adaptation and change by organizations, and requires employees to strive to improve their company's work processes. Generally speaking, knowledge is power and through process of knowledge sharing, the power and potential of knowledge is disseminated.

Consistent with resource-based view, organizations are increasingly adopting KM to achieve and maintain high levels of organizational performance (Ho, 2008). On a similar note, Nonaka (1994) stated that knowledge is invaluable for the organization's future

development. Knowledge regarding customers, products, technologies, markets and competitors could lead to the creation of higher possibilities of sustainable competitive advantages. Similarly, Zack (1999) also acknowledges that knowledge is the most important strategic resource and the firm's ability to acquire, integrate, store, share and apply knowledge is its most crucial strength in building and maintaining competitive advantage.

Within the context of service sector in Jordan, the finding indicates that the performance of service organizations is paved by KM that has become an imperative success factor in today's service organizations which rely heavily on the human element to provide services to customers.

### 6.2.4 Mediating Effects of Knowledge Management on the Relationship between

#### Human Resource Management Practices and Organizational Performance

The present study was also interested in examining to what extent KM mediates the relationship between HRM practices and OP. It was revealed that technical KM (partially) mediated the relationship between HRM practices (i.e., staffing, and training and development) and OP. In contrast, the relationship between other dimensions of HRM practices (i.e., performance appraisal, compensation, job security, and employee participation and involvement) and OP was not mediated by technical KM. This result means that staffing and training and development were found to have both direct and indirect effect on OP. In contrast, performance appraisal, compensation, job security, and employee participation and involvement were found to have direct effect on OP.

The above finding implies that organizations need to effectively and efficiently manage KM through the implementation of effective HRM practices in the hopes of enhancing OP. This finding is consistent with Chen and Huang's (2009) study who observed that KM fully mediated the relationship between strategic HRM practices and innovation performance. The finding of the present study is also consistent with recent research by Lopez-Cabrales, Luno, and Cabrera (2009) who found that KM mediated the relationship between HRM practices and innovation activity. The present result reinforces resource-based view in that KM is valuable in leveraging HRM on OP.

The present study also revealed that cultural KM (partially) mediated the relationship between HRM practices (i.e., staffing, and job security) and OP. It was also found that the relationship between HRM practices (i.e., staffing, training and development, and job security) and OP was partially mediated by human KM. This result means that management of knowledge has been recognized as crucial factor in gaining and maintaining competitive advantage (Rezgui, 2007). According to Jantunen (2005), knowledge is a strategic asset that assists firms in maintaining their competitive advantage in a dynamic environment. Du Plessis (2005) further explained that KM aims to get people to innovate, collaborate and to rectify decisions in an efficient way; in other words, it aims at getting people to focus on high-quality knowledge.

The mediating role played by KM fills the missing link between HRM practices and organizational outcomes that illustrates the presence of black box, as claimed by several scholars (Delaney & Huselid, 1996; Hislop, 2003; Paauwe & Boselie, 2003). The black box model indicates an unknown and invisible mechanism that increases OP (Katou, 2008). Rezgui (2007) argued that KM is the basic activity to obtain, develop and sustain

intellectual capital in organizations. In other words, management of knowledge not only serves as a predecessor to OP but also a mediating mechanism between organizational factors and OP, as shown by previous studies (e.g., Haque & Anwar, 2012; Huang & Li, 2009; Tan & Nasurdin, 2011; Zheng et al., 2010). For example, Zheng et al. (2010) focused on the mediation of KM on the relationship between organizational culture, strategy, structure and OP. They showed that the mediating effect on the relationships studied. In the same vein, Ozbag, Esen, and Esen (2013) found that KM mediated the association between HRM capabilities and innovation. The revelation of the present study that KM mediated between HRM practices and OP fills the gap in the existing literature on the role of KM as an important generative mechanism. This is thought to be a major contribution to the field of human resources management equipped with strong empirical evidence from a developing country business environment like Jordan. The findings are important because it can enhance and clarify the understanding of how HRM practices are related to OP in the context of resource base view theory.

According to previous literature, resource-based theory (RBV) of a firm proposes that a firm's performance is determined by its unique set of resources that are valuable, rare, irreplaceable, and not readily reproduced (Barney, 1991), which account for the differences in firm performance (Grant, 1991). Based on RBV, knowledge has been identified as one of the sources of competitive advantage (Lee & Choi, 2003). RBV attributes firm performance differences to resource asymmetry that uses KM to explain performance differences across firms. Adopting the RBV of the firm, researchers suggest that KM have an impact on firm performance because KM resources needed to achieve

strategic business objectives are heterogeneously distributed across firms (Lee & Choi, 2003).

### 6.2.5 Moderating Effect of Competitive Strategies on the Relationship between Knowledge Management and Organizational Performance

The present study's fifth research question was developed to determine whether competitive strategies moderate the relationship between knowledge management and organizational performance. According to Porter (1985), strategy is the positioning of business to increase the value of the capabilities that makes the business distinct from its competitors. Porter added that a distinctive value may be realized through the pursuant of generic strategies namely cost leadership, differentiation and focus. His strategic typology stresses on two kinds of competitive advantage namely cost leadership and differentiation. Both of these are called generic strategies. Another strategy proposed by Porter (1980) is focus.

To date, no study has assessed the possible moderating role of competitive strategies on the relationship between KM and OP. Hence, the present study contributes to the existing literature on the effect of cost leadership, marketing differentiation, and innovation differentiation on KM-OP link by providing empirical evidence on the moderation effect of competitive strategies. Despite some empirical evidence found, the findings of the present study are preliminary and should be dealt with caution. The following sections explain the moderating effect of each competitive strategy.

# 6.2.5.1 Moderating Effect of Cost Leadership on the Relationship between Knowledge Management and Organizational Performance

In general, the results of the present study showed that cost leadership moderated the relationship between human KM resource and OP. In particular, it was found that when organizations have a high level of cost leadership, human KM tends to result in better organizational performance than organizations under a low level of cost leadership. This means that increasing OP seems to hinge on proper alignment between human KM and cost leadership strategy. The finding obtained in the present study appears to be consistent with other scholars who found cost leadership strategy to be having a moderating effect (e.g., Guthrie, Spell, & Nyamori, 2002; Sung & Mathews, 2003).

In Jordan, cost leadership is an important strategy pursued by business organizations due to the overall economic situation in the country. Such strategy enables business organizations in the service industry to obtain good organizational performance because employees can share with each other innovative solutions on how to provide efficient services at low cost. The knowledge management practices within the firms means learning from the past experiences and accumulating the expertise to achieve the firm goals at low cost (Gebauer, 2008). When the organization encourages employees to interact with each other and share amongst them the best way to use the firm internal and external resources to add value to the services offered, business organizations benefit from such practices which allow them to gain and expand their market share as well as financial performance (profits, return on assets, return on investment).

# 6.2.5.2 Moderating Effect of Marketing Differentiation on the Relationship between Knowledge Management and Organizational Performance

In general, the results of the present study showed that marketing differentiation moderated the relationship between human KM resource and OP. In particular, it was observed that when organizations have a high level of marketing differentiation, they reported significantly better organizational performance due to enhanced human KM. The result suggests that maximizing OP appears to depend on proper aligning human KM with differentiation strategy. The finding obtained in the present study appears to be consistent with other scholars who found marketing differentiation to be having a moderating effect (e.g., Guthrie et al., 2002; Sung & Mathews, 2003).

In Jordan, some service organizations differentiate their product or service by promoting the uniqueness of their product features, product complexity, timing of product introduction, or location (Gebauer, 2008). To be able to achieve this, creativity and talent of individuals and groups within the firms is needed. In this context, knowledge management practices in the firm, where employees share knowledge and expertise through active interactions at work, provide an important condition to facilitate the organization to achieve its differentiating strategy (Gebauer, 2008), and hence its performance.

# 6.2.5.3 Moderating Effect of Innovation Differentiation on the Relationship between Knowledge Management and Organizational Performance

In general, the results of the present study showed that innovation differentiation moderated the relationship between human KM resource and OP. Strategies of innovation

differentiation aim to develop innovative and attractive products by excelling in quality, efficiency, design innovations or style (Damanpour& Schneider, 2006). According to Damanpour and Schneider (2006), innovation is considered a significant source of competitive advantage of firms.

In the present study, the result suggests that service organizations with higher degree of innovation differentiation strategies will perform better than those service organizations with the implementation of human KM. The finding obtained in the present study appears to be consistent with other scholars who found innovation differentiation to be having a moderating effect (e.g., Guthrie et al., 2002; Sung & Mathews, 2003).

In Jordan, some organizations use innovation differentiation strategies to enhance their market position as well as their services or products (Al-alak & Tarabieh, 2011). In such organizations, they have a clear vision, with long time horizons and market focus orientation, as well as strong skills to link between the operations and strategy. Also they emphasize learning from experience and accumulate knowledge in a functional manner, and tolerate error and failure and consider such result as source for learning (Edwan & Jallad, 2011). This organizational climate supports employee innovation to help the organization differentiate their identity and products. The role of KM within this climate becomes crucial in re-organizing and re-producing the knowledge in functional and innovative manner (Edwan & Jallad, 2011). Thus the innovation differentiation strategy coupled with KM facilitates organizational performance, as reflected by long team financial profit indicators.

#### 6.3 MANAGERIAL AND THEORETICAL IMPLICATIONS

The findings from this study have several important implications to both practice and theory, as discussed below.

#### **6.3.1 Theoretical Implications**

From the main and interacting effects undertaken in the analysis in the present study, it can be said that the findings of the present study extend the findings of previous studies. The present study has contributed some new findings to the body of knowledge, especially in the area of organizational performance. First using Jordanian service sectors as a sample to demonstrate the relationship between HRM practices and OP gives a richer perspective to the organizational performance literature. To date, most of the previous studies conducted examined the relationship between HRM practices and OP in Western society (Boselie et al., 2001; Boselie et al., 2005; Guest et al., 2003; Hoque, 1999; Huselid, 1995; Vlachos, 2008). The findings from this non-western study confirm the universality of the HRM paradigm across different nations, societies, culture and organizational context, as claimed by Khasawneh and Alzawahreh (2012). This study affirms that, despite the different contextual situations, HRM practices do influence OP in the non-Western context, especially in Asia (Bjorkman & Xiucheng, 2002; Huang, 2000; Ngo et al., 1998).

A few local studies examined the antecedents of OP and contributed to the organizational performance literature (Altarawneh & Aldehayyat, 2011; Khasawneh & Alzawahreh, 2012). However, the present study extends the OP literature by examining the indirect influence of HRM practices on OP. As mentioned earlier, there is a lack of systematic study of the mediating effects of KM on the relationship between HRM

practices and OP in a single study. Most of the previous research studied the direct effect of HRM practices on KM as well as the direct effect of KM on OP. The present findings provide some empirical evidence about the indirect nature of the relationship between HRM practices and OP, especially via several dimensions of KM in the service sectors. The findings have answered the calls for more attention concerning the mechanism of how and why HRM practices influence OP (Delaney & Huselid, 1996; Hislop, 2003) and how knowledge may affect this relationship.

In addition, the present study extended Chang and Chen's (2002) work by examining competitive strategies as a moderator in the relationship between HRM practices and OP. Given the fact that previous studies mainly examined the direct influence of competitive strategies on OP (Hashim, 2000; Jusoh & Parnell, 2008; Ortega et al., 2009), the present study provides further information on the relationship between KM and OP by incorporating potential moderating variables into the overall process. Certain dimensions of competitive strategies (i.e., cost leadership, innovation differentiation, and marketing differentiation) were found to moderate the relationship between knowledge management and organizational performance.

Result of this study has strongly lent support for the possible universality of resource based-view (RBV). The premise of this view had been manifested in this study through the HRM practice and OP relationship. According to resource based view, a firm's resources are key determinants of competitive advantage and performance. It holds that in most cases, organizations create value by producing what others can have it very hard to imitate. It is believed that though traditional sources of competitive advantage including natural resources, technology and economies of scale lead to the creation of value. The argument

states that these types of resources are imitable particularly when compared to a complex social structure like an employment system.

The present study has also contributed to contingency theory by testing it in the Jordan service sector. Based on this theory, the role of competitive strategies as a moderating variable in the relationship between HRM practices and OP (Guthrie et al., 2002) was investigated, as there was no study to date that had examined competitive strategies as a moderating variable. By considering using this theory on the moderating effect, this study has shown the applicability of the theory.

By considering resource-based view and contingency theories, this study has affirmed the universality of the theories in other settings other than the western setting in particular in the context of Jordanian service sector. Majority of the studies conducted in the past mostly consider the manufacturing sector other than the service sector i.e. steel industry (Katou, 2008), oil and gas industry (Khan, 2010) and industrial sector (Katou & Budhwar, 2006, 2007). The service sector has been ignored in the past perhaps due to its lesser importance to the economy. However, the current fast growing innovation and service orientation may likely be the reason why the service sector has now become more prominent. By this study considering the Jordan service sector, it has gone a long way in contributing to the sector.

#### 6.3.2 Managerial Implications

The findings of the present study could offer some insight to managers and practitioners in organizations into how to enhance organizational effectiveness. It has been shown that HRM management practices play a significant role in increasing OP. Hence,

managers should re-visit their current HRM practices particularly staffing, training and development, and job security to improve organizational effectiveness and competitiveness. Not only HRM practices have significant bearing on OP, they also able to facilitate KM, dissemination and sharing amongst employees. Sharing of knowledge among the employees and the stakeholders will benefit the organization as it will enable them share ideas and knowledge about their work or duties for the betterment of the organization. In other words, HRM practices are key enablers for service organizations to increase their capacity by using KM tools and activities.

The present study also showed that KM can enhance OP when appropriate strategies are implemented. Even though KM is useful to organizations due to the sharing of knowledge qualities, its efficacy is limited if not aligned with the organization's strategy. Hence, to take the fullest advantage of KM, organizations need to consider their strategy well. On the basis of the empirical findings of the present study, organizations may wish to consider the significance of HRM as an important strategic partner in the decision-making processes. By doing so, HRM experts in the organization can play a more active role in reinforcing organizational changes through their corroboration with front-line managers. Management should know how to integrate these practices in a way that contributes to the realization of organizational objectives. It should also be aware that a changed paradigm of people management is called for in the current dynamic business environment. The new approach should concentrate on attracting and retaining talents, providing need-based training and development, designing comprehensive and fair performance appraisal, developing attractive compensation system, and allowing employee participation so that sustained competitive advantage can be achieved at all levels.

### 6.4 LIMITATIONS OF THE STUDY AND DIRECTIONS FOR FUTURE RESEARCH

The present study has provided some insight into the importance of HRM practices, KM, and competitive strategies in OP. However, the present study has numerous notable limitations, both conceptual and methodological. These limitations confine the interpretations of findings. Firstly, this study employed a cross-sectional design of data collection method, i.e. the survey method - this method obtains the participants' perceptions in a single point in time. Because of this, this study is not suitable to prove causal relationship on a longitudinal basis and hence, the explanation of factors influencing OP is limited. Secondly, the findings may not be generalized in a larger context across cultures of other industries because the data collected from the present study were limited to the Jordanian service organizations. Different industries and business environments may differential effects of HRM practices, KM, and competitive strategies on OP, so other studies can explore their relationships in different contexts. Thirdly, regarding the study approach, the present study only employed the quantitative approach to determine the relationships between all variables. Finally, the present study examined KM and competitive strategies as a mediator and moderator on the relationship between HRM practices and OP.

Nevertheless, from the above limitations, the present study highlights opportunities for further research. Future research directions derived from the present study can be summarized as follows. First, given that the survey research in the present study was based on a cross-sectional design, further work needs to be conducted to establish the effect of changes over a longer period of time in the aspects of HRM practices, KM, competitive

strategies and OP. To this end, future researches should employ longitudinal method of study to examine how organizational performance is affected by HRM practices, KM, and competitive strategies. Second, the study sample is limited to the service sector in Jordan. Future studies could replicate the present study in other countries or cultures, particularly in terms of the mediating effect of knowledge management and the moderating effect of competitive strategies. In addition, future research should also be conducted in other sectors or industries to extend the knowledge about the factors that contribute to the improvement of organizational performance in Jordan. Third, because this study employed the quantitative method in both design and analysis, the collected information is limited to the responses in the questionnaire. On the other hand, a qualitative method could add to further insights and understanding of the problem setting. In addition to this, a more meaningful determination could be brought about by combining the use of both qualitative and quantitative methods as they are complementary to each other. Final, it would be valuable to examine the effect of contextual factors of regulations, labor market environment, organizational climate, cultural values, and style of leadership that moderate or mediate the relationship between human resource practices and organizational performance (Collins & Smith, 2006; Ghebregiorgis & Karsten, 2007; Khan, 2010).

## 6.5 CONCLUSION

The present study has examined the influence of HRM practices on OP in service sector in Jordan. Specifically, this study examined the role of KM as a mediating variable on the relationship between HRM practices and OP. Also, this study examined the competitive strategies as a moderating variable on the relationship between KM and OP.

The present study has identified several gaps that still exist in the current OP literature on the relationship of HRM practices and KM with OP. Previous studies in this area did not address the following issue in their research: possible moderators of the relationship of HRM practices and KM with OP. This study has contributed to this body of knowledge by examining the effect of HRM practices and KM on OP, which included competitive strategies as a moderator. Thus, the current attempt has managed to fill the gaps that exist in the OP literature.

The present study used theory of resource based view (RBV) to test the model hypothesized. RBV has been mainly been used in the US, UK or other countries ignoring Middle East countries like Jordan. By considering Jordan, the present study had contributed to the applicability of the theory in different cultural contexts. Based on contingency theory, the present study also investigated the role of competitive strategies as a moderating variable in the relationship between HRM practices and OP (Guthrie et al., 2002). To date, none has been examined the moderating role of competitive strategies in the relationship between KM and OP. Contingency theory postulates that the relationship among relevant independent variables and the dependent variable differ at varying levels of the critical contingency variable (Chang & Huang, 2005; Colbert, 2004). Results of the study managed to validate the theoretical proposition of competitive strategies in moderating the effect of HRM practices and OP. In particular, KM affects OP when organizations implement a combination of strategies.

In sum, this research has contributed to the existing literature on the effects of HRM practices on OP in particular within the context of developing nations such as Jordan and within the context of services-oriented settings (Katou & Budhwar, 2006, 2007). Whilst the

present study has provided empirical insight into how and why HRM practices influence organizational effectiveness through KM and competitive strategies, more studies are needed to validate the findings. The findings are also insightful to managers and practitioners in facilitating efforts toward re-visiting and re-thinking their current practices toward the accomplishment of organizational goals and objectives.



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