MARKET ORIENTATION IN HIGHER EDUCATION AND INNOVATIVENESS AS A MEDIATING VARIABLE

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Especially dedicated:

To my father Mohammed and my mother Taleah, the greatest two persons forever.

To my wife and my life partner.

To my daughters Sarah, Bara'ah, and Bothainah the colours and joy of my days.

To my son Tameem, my dearest friend.

To my brothers.

To my sisters.

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ABSTRACT

Market orientation (MO) is an operationalization of a marketing concept and considered vital to enhance organization profitability and sustainability especially for businesses. However, efforts to investigate MO in the educational context have not been extensively conducted in comparison to those in the business settings. This research assessed the influence of top management emphasis and internal market orientation (IMO) as antecedents to MO in higher education institutions (HEIs). It also examined the effect of IMO and MO on HEIs perceived performance. In addition, the mediation role of innovativeness to the relationship of MO and perceived performance was investigated. The unit of analysis in this research was an educational institution that provides tertiary education under the supervision of the Ministry of Education in Saudi Arabia. In this quantitative cross sectional study, the whole population was targeted and data was collected online. There were 263 usable responses from 537, representing 48.97% response rate. The findings of this research indicated that there is a positive relationship between top management emphasis and IMO, as well as with MO. Results also showed that IMO was found to be positively related to MO. On the contrary, the relationship between IMO and HEIs perceived performance was found to be insignificant. Besides that, the study disclosed that MO is positively related to HEIs perceived performance. In this study, innovativeness was found to be partially mediating the relationship between MO and perceived performance. The research has illustrated the application of MO in the educational setting of a developing country. Additionally, the findings of the study will help academic managers and education policy makers in Saudi Arabia to develop market oriented strategies to improve HEIs performance.

ABSTRAK

Orientasi pasaran (MO) merupakan pengoperasian konsep pemasaran dan dianggap penting dalam meningkatkan keuntungan dan kemampanan sesebuah Namun begitu, usaha-usaha untuk organisasi terutamanya bagi perniagaan. menyelidik MO dalam konteks pendidikan belum dijalankan dengan meluas jika dibandingkan dengan bidang perniagaan. Kajian ini menilai pengaruh penekanan pengurusan atasan dan orientasi pasaran dalaman (IMO) sebagai anteseden kepada MO di institusi pengajian tinggi (HEIs). Kajian ini juga mengkaji kesan IMO dan MO ke atas tanggapan prestasi HEIs. Di samping itu, peranan pengantaraan daya pembaharuan hubungan MO dengan tanggapan prestasi juga dikaji. Unit analisis dalam kajian ini ialah institusi pendidikan yang menawarkan pendidikan tinggi di bawah penyeliaan Kementerian Pendidikan Arab Saudi. Dalam kajian keratan rentas kuantitatif ini, keseluruhan populasi telah disasarkan dan data dikumpulkan dalam talian. Terdapat 263 jawapan yang boleh digunakan daripada 537 jawapan yang terkumpul, mewakili kadar tindak balas sebanyak 48.97%. Hasil kajian ini menunjukkan bahawa terdapat hubungan yang positif antara penekanan pengurusan atasan dengan IMO, begitu juga dengan MO. Hasil kajian juga menunjukkan bahawa IMO didapati mempunyai hubungan positif dengan MO. Sebaliknya, hubungan antara IMO dengan tanggapan prestasi HEIs didapati tidak signifikan. Selain itu, kajian ini mendedahkan bahawa MO mempunyai hubungan positif dengan tanggapan prestasi HEIs. Dalam kajian ini, daya pembaharuan didapati berperanan sebagai pengantara separa dalam hubungan antara MO dengan tanggapan prestasi. Kajian ini menggambarkan pelaksanaan MO dalam bidang pendidikan sebuah negara membangun. Tambahan pula, hasil kajian ini dapat membantu pengurus akademik dan pembuat dasar pendidikan Arab Saudi membangunkan strategi berorientasikan pasaran untuk meningkatkan prestasi HEIs.

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LIST OF ABBREVIATIONS

AACSB - The Association to Advance Collegiate Schools of

Business

AMOS - Analysis of Moment Structures

ASV - Average shared square variance

AVE - Average Variance Extracted

CFI - Comparative Fit Index

CMIN - maximum likelihood estimation chi-square

CO - Competitor Orientation

CR - Critical Ratio

df - Degree of freedom

EC - Efforts Coordination

E-MBA - Executive Master of Business Administration

ERO - Employer Orientation

GDP - Gross Domestic Product

GE - Graduates Employability

H - Hypothesis

HEIs - Higher Education Institutions

IMO - Internal Market Orientation

INNOV - Innovation

KAAU - King Abdul-Aziz University

KAUST - King Abdullah University of Science and Technology

KFUPM - King Fahad University of Petroleum and Minerals

KSU - King Saud University

MBA - Master of Business Administration

MI - Modification Indices

MO - Market Orientation

MOHE - The Ministry of Higher Education (Saudi Arabia)

MSV - Maximum shared square variance

NCAAA - The National Commission for Academic Assessment and

Accreditation (Saudi Arabia)

NIST - National Institute of Standards and Technology (United

States of America)

OP - Overall Performance

QS - The Quacquarelli Symonds World University Rankings

R&D - Research and Development

RMSEA - The Root Mean Square Error of Approximation

RP - Research performance

RQ - Research Question

SEM - Structural Equation Modelling

SOIGD - Information Generation and Dissemination

SOR - Student Orientation Responsiveness

SPSS - Statistical Package for the Social Sciences

TLI - Tucker-Lewis Index

TME - Top Management Emphasis

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CHAPTER 1

INTRODUCTION

1.1 Preamble

Prior marketing and management researches investigated several strategic orientations such as market orientation (MO) (Kohli and Jaworski, 1990; Narver and Slater, 1990a), entrepreneurial orientation (Covin, Prescott, and Slevin, 1990; Covin and Wales, 2012), learning orientation (Baker and Sinkula, 1999), product orientation, technology orientation, and stakeholder orientation (Berman, Wicks, Kotha, and Jones, 1999; Freeman, 1984; Greenley and Foxall, 1997). Additionally, prior studies considered the vital impact that strategic orientations had on performance. Hakala (2011:8) investigated the interaction between strategic orientations and concluded that there were three multiple strategic orientation approaches: "orientation as sequences in development, orientation as alternatives to choose from, and orientation as complementary patterns." Although combining more than one strategic orientation has shown a positive impact on organizational competitive advantage (Baker and Sinkula, 1999a; Bhuian et al., 2005), MO contributes to firm performance significantly more than other strategic orientations such as innovation, learning, and entrepreneurial orientations (Hult and Ketchen, 2001; Kirca et al., 2005; Zhou et al., 2005).

Managers of higher education institutions (HEIs) utilize marketing approaches to deal with contemporary challenges. Market orientation is seen as one

of these strategic tools that would enhance academic institutions' position to achieve more in terms of key performance indicators (Hemsley-Brown and Oplatka, 2010). However, some researchers have an objection to utilizing such business tools in academic arenas because they consider it unethical to transform the educational process into merely buyers, consumers, and commodities. In this regard, Natale and Doran (2012:187) described the situation in which HEIs are transforming dramatically to the business and marketization format: "An ethical crisis has emerged within education internationally and intervention is urgently needed." In contrast, the positive consequences of marketing practices and implications for HEIs are not deniable. Hence, using business and marketing tools with caution may optimize academic environments to attain higher levels of effectiveness. Exclusively, the present research discussed MO and its influence on educational institutions' outcomes in Saudi Arabia.

1.2 Background of the Research

Market orientation is the cornerstone of strategic marketing in modern organizations. Many contemporary enterprises apply different levels of it, depending on their organizational ability to conduct such strategy through concentrating on customers and, at the same time, giving other stakeholders more attention.

Previous decades have witnessed the spread of theoretical and empirical investigations of MO and its main dimensions (which are customer orientation, competitor orientation, and efforts coordination), as well as its main actions of market intelligence process, which are intelligence production, distribution, and reactions to this intelligence. These concepts and dimensions developed from the original efforts of Kohli and Jaworski (1990) and Kohli, Jaworski, and Kumar (1993), as well as works by Narver and Slater (1990a) and Slater and Narver (1996). Those original works were developed in business contexts and for-profit circumstances for both service and commodity firms. A decade later, following recommendations from marketing scholars, MO discussions extended to consider nonprofit organizations, including HEIs (Caruana, Pitt, and Berthon, 1999; Hakala,

2011b; Hammond, Webster, and Harmon, 2006; Rivera-Camino and Ayala, 2010). Consequently, because of the complexity of the multidimensional relationship between MO and different firm performance indicators, those relationships are moderated by some internal and external factors (Hemsley-Brown and Oplatka, 2006, 2010; Hsieh, Tsai, and Wang, 2008).

1.2.1 The Emerging Figures of Higher Education in Saudi Arabia

Saudi Arabia has one of the best emerging economies among developing countries and has a very ambitious goal to be a knowledge-based, rather than a rentier state, economy. Using its oil revenue, Saudi Arabia has started to build massive fundamental, educational, and health care constructions simultaneously. As a result, HEIs in Saudi Arabia, as vital parts of the public sector, are growing in terms of the number of institutions, students, and employees. According to the Observatory on Higher Education (2014), the number of universities in the country rose from 20 to 34 during the past seven years. In the same period, the number of colleges increased 74% to reach 569; 12.6% of these are private colleges. As a result, the country has witnessed an oversupply of tertiary education seats for postsecondary school individuals for the first time in a decade.

Similarly, the number of new students enrolled in HEIs increased from 272,854 in 2010 to 443,179 in 2013. Additionally, the number of current students in HEIs reached 1,358,312 in the year 2013. Meanwhile, the number of HEI graduates rose by 35.4% from 2008 to 2012, with the total number reaching 667,486 graduates, more than half of which were female (Table 1.1). Likewise, the number of Saudi students studying abroad reached 147,046 by the end of 2013, and the number of faculty members in HEIs increased by 55.5% to 65,000, with 58% of them being Saudi citizens. Finally, government spending on higher education increased from 25.2% in 2010 to 46.5% in 2013 as a portion of total spending on education. Thus, these numbers provide evidence that the development of higher education in Saudi Arabia is not merely a coincidence but rather a determination of government

willingness to invest country resources in human capital as a driver toward a knowledge-based economy, which is stated in the third objective of the Tenth Development Plan (Ministry of Economy and Planning, 2014).

Table 1.1 Higher Education Students in Saudi Arabia (2013)

	Current students		Graduated	Ct. Janta
Student Indicators	Freshman students	Senior students	students students	Students abroad
Total number	443,179	1,358,312	146,644	132,542
Male	245,850	708,111	(50.6)	98,389
(%)	(56)	(52.1)		(74.2)
Female	197,329	650,201	(49.4)	34,153
(%)	(43)	(47.9)		(25.8)
Distribution of students				
based on learning type				
Traditional learning	341,145	1,039,698	12,6428	132,542
(%)	(77)	(76.6)	(86.2)	(100)
Distance learning	102,034	318,614	20,216	0
(%)	(23)	(23.4)	(13.8)	(0)
Distribution of students				
based on type of				
institution/scholarship				
Government institution/	380,079	116,5091	11,5879	117,455
scholarship				(89.2)
Private sector/self-paid	63100	193221	30765	15087
				(10.8)
Percent of Saudi	95.7%	95.4%	96.8%	100%
citizens				
Percent of students in postgraduate studies*	4.9%	4.5%	8.2%**	32.6%

Source: Researcher compilation from the Ministry of Higher Education (2014). *Graduate studies here include PhD, master, and high diploma. **(5.4%) were high diploma; thus, only (2.8%) of total graduates were PhD and master.

However, according to Dokhaikh (2012) one of the challenges for Saudi universities to achieve quality standards is the annual increase in admitted students and universities. Therefore, responsible agencies of higher education in Saudi Arabia have taken some actions to maintain an acceptable level of quality in HEIs. For instance, the Ministry of Higher Education (MOHE) established the National Commission for Academic Assessment and Accreditation (NCAAA) to maintain the standards of quality within the expanded Saudi higher education system.

Additionally, the MOHE launched the Plan for Achieving Excellence in Sciences and Technology (Afaq) (MOHE, 2010). This is a strategic plan that helps the system of higher education in various fields contribute to building a knowledge-based economy and keep up with current international trends in higher education (MOHE, 2010). Moreover, higher education in Saudi Arabia has experienced some changes and flexibility in response to the society's needs and changes. For example, King Abdullah University of Science and Technology (KAUST) was established in 2009 to be the first research university with rigorous international standards and a very ambitious vision to be a world leader in science and technology (Smith and Abouammoh, 2013). Furthermore, to meet a dramatically increased in demand for distance learning and address the inadequacy of existing distance learning in the country, Saudi Electronic University became the first official distance higher education provider in the country (Saudi Electronic University, 2014).

The reputation of HEIs in Saudi Arabia is another remarkable aspect of the changes emerging nowadays. Thus, the HEIs are seriously striving for quality and excellence in performance to acquire a world-class ranking in higher education (Hazelkorn, 2012). For example, King Saud University (KSU) has demonstrated its world rank on the Quacquarelli Symonds World University Rankings (QS) on its website to enhance its position and image. Likewise, the faculty of industrial management at King Fahad University of Petroleum and Minerals (KFUPM) announced that it is accredited by the Association to Advance Collegiate Schools of Business (AACSB) as the first of its type in the region. In addition, public universities in Saudi Arabia have launched several paid programs to secure permanent financial resources for their future expansions and fulfill some of their community growth needs. For instance, the top three universities—namely, KSU, King Abdul-Aziz University (KAAU), and KFUPM—each launched executive master of business administration (E-MBA) programs, which are more flexible in timing and joining requirements compared to normal MBA programs, thereby allowing them to meet increased demands for continuous learning among professionals.

1.2.2 The Challenges and Difficulties of Saudi Higher Education

In spite of the ambitious initiatives, HEIs in Saudi Arabia have encountered challenges and difficulties that may result in a lack of efficiency in contributing to the country's collective development. These challenges include, for example, unbalanced distribution of students among disciplines in HEIs as well as the obvious mismatch between employers' requirements in the labor market and graduate competencies. As a consequence, high rates of unemployment among those with tertiary education have increased gradually. Another challenge for HEIs is how to retain and develop capable employees in order to optimize quality and, in turn, overall performance. Finally, one of the issues that needs more attention in HEIs is the link between academics, research activities, and social and economic needs.

Based on the unbalanced distribution of students in different disciplines among Saudi Arabian HEIs, Alturkistani (1999) and Alshumaimery (2000) suggested that HEIs should consider an urgent remedy to change the acceptance policy in some disciplines. Viviano (2003) and Alamri (2011) mentioned that many young Saudis choose to receive their bachelor degrees in Islamic studies and social sciences, both of which are viewed as irrelevant to the labor market (Figure 1.1). Although HEIs in Saudi Arabia have undertaken some initiatives to reduce this unbalance between labor market needs and student distribution among different disciplines, recently the Observatory of Higher Education (2014) revealed that the number of students in two different disciplines—namely, 1) humanities and social sciences and 2) health, engineering, and sciences—increased at different rates. The first group, considered to be low in demand in the labor market (especially in the private sector) grew from 703,909 in 2009 to 1,322,178 in 2013, whereas the second group, considered to be in high demand (in both public and private sectors), has grown from 326,715 in 2009 to only 479,313 in 2013. Madhi and Barrientos (2003:70) stated that

"higher education remains the preferred option of young Saudis compared with vocational and technical education, but the distribution of higher education students is overwhelmingly skewed towards the humanities. This suggests that the education and training system are not fully able to supply the economy with the range and quantity of skilled workers it requires."

Thus, the majority of current students are in disciplines considered less competitive in the labor market (especially in the private sector) (see Figure 1.1).

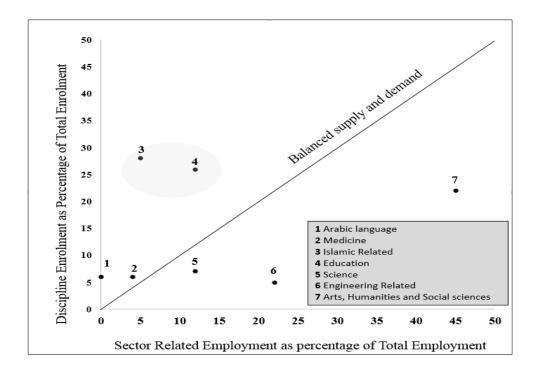


Figure 1.1 Discipline/Total Enrollment vs. Sector Labor Force, 2002 (Source: Maroun and Samman, 2008: 7)

Another serious challenge for HEIs in Saudi Arabia is the negative attitude toward local graduates in the labor markets, especially in the private sector. Baqadir, Patrick, and Burns (2011) highlighted that employers from the private sector complained of the lack of vocational training, skills, and attitudes among fresh graduates. They emphasized three skills that need more attention by educational agencies: focused knowledge, work morals, and generic skills. In other words, employers' educational expectations are higher than graduates' competences (Alsarhani, 2005; Maroun and Samman, 2008; Ramady, 2010). This suggests that some cultural practices may have an impact on higher educational outputs in the labor market. Alasfor and Khan (2013) noted that some job seekers look for upper to middle positions after graduation. They added that "Saudis are hardly found in low-ranked jobs, such as janitorial positions, these jobs are done by foreign workers and

these positions are looked down upon by most locals" (Alasfor and Khan, 2013:247). In other words, graduates' career expectations are higher than the positions found in the labor market. Therefore, there is a noticeable mismatch between job seekers and providers.

In some challenging circumstances, the majority of Saudi higher education graduates look forward to enrolling in public sector agencies (including semipublic leading companies owned by the government in the oil, gas, electricity, water, airlines, railways, and insurance sectors). There are some reasons behind the attraction of the public sector to job seekers. For instance, the number of public employees increased three times between 1985 and 2009. The majority of highly qualified citizens work in the education, health, or oil sectors. Job security is the main reason for the increased interest in the public sector among fresh graduates (Al Sulimani, 2006). Mellahi (2007) described this as a social contract that has taken place between the government and its citizens. Moreover, Al-Asfour and Khan (2013) found another advantage to the public sector: Employees can develop their career through a clear path of education and training. Nevertheless, the fact is that the public sector cannot create and secure enough jobs for the increasing number of graduates every year. The growth in these sectors is limited due to their nature as public agencies. On the other hand, the private sector has the largest opportunity for job creation in the country. Unfortunately, securing a good private-sector job does not have as low of requirements as in the government sector. The competition from highly skilled and qualified foreigner workers is also a major issue. Therefore, higher education graduates' competences and qualifications are not adequate to meet employers' requirements in the private sector. Accordingly, HEIs in Saudi Arabia are working to decrease the gap between their graduates' qualifications and potential employers' requirements. Saudi Arabian HEIs must adopt a dynamic and flexible model of management to improve the competition against the time constraints for the dramatic increases of graduates every academic year. Consequently, HEIs have to concentrate more on the stakeholders of students, employees, competitors, regulators, employers of graduates, and the whole society to fulfill the main objectives behind postsecondary education, which comprises three aims: knowledge transmission, research leading, and community aiding (Ministry of Planning, 2009).

Chronically, Saudi Arabia suffers from unemployment among qualified individuals (Al-Mubaraki, 2011). According to the Tenth Development Plan of Saudi Arabia, unsolved unemployment problems emphasized the need to raise the internal efficiency of higher education and warned that the recent expansion of absorptive capacity should not be at the expense of competence and performance. The plan also called for the improvement of teaching competency and the continual monitoring of national and international bodies of accreditation (Ministry of Economy and Planning, 2014). However, according to the Ministry of Labor, the number of unemployed Saudis increased by 5.3% in the first half of 2014. The total number of unemployed Saudis increased to 657,047 by mid-2014 compared to 622,533 at the end of 2013 (Figure 1.2).

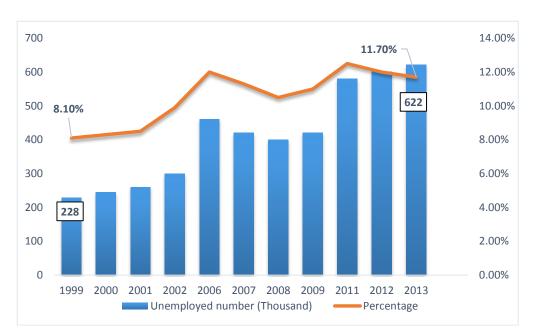


Figure 1.2 Unemployed number of Saudis and unemployment rates 1999–2013. Source: (Ministry of Labor, 2013)

In fact, unemployment is a symptom of some social and hierarchal issues. One of the issues relating to this research investigation is the low employability among Saudi graduates from HEIs. In general, employability is defined in different ways and depends on a variety of perspectives. Lees (2002) stated that employability is affected by the ability-based curriculum, including the acquisition of a wide range of key or core transferable skills, as well as relevant broad attributes and knowledge.

On the other hand, the labor market regulator definition of employability is related to graduates securing desirable graduate-level jobs within a limited period following graduation and before any retraining is required (Harvey, 2001). Another definition asserted that employability implies getting any job, even if graduates are overqualified for the position (Stewart and Knowles, 1999). Therefore, employability relates to the acquired transferable knowledge that graduates should obtain through training and education. In addition, there are other aspects besides knowledge, like generic skills and personal traits, that HEIs could build within programs and courses. Employment statistics in Saudi Arabia reveal that non-Saudi workers in the private sector make up more than 80% of the total workforce (Table 1.2). The Ministry of Labor categorizes the private sector workforce into five main groups based on skills, but for the purpose of comparison, the researcher merged them into three main clusters: 1) highly skilled workers with tertiary education, 2) skilled workers with/without secondary education, and 3) low-skilled workers with/without education. The Saudi workforce in the private sector forms 25%, 24.2%, and 11.6%, respectively, in the groups mentioned above (see Table 1.2).

Table 1.2 Workforce categories in Saudi labor market (private sector) based on skill level and nationality

Worker category	Non- Saudis	Saudis	Total	Saudis to non-Saudis (%)
Highly skilled worker with tertiary education	1348314	337664	1685978	25
Skilled worker with/without secondary education	2597582	630860	3228442	24.2
Low-skilled worker with/without education	4266886	498329	4765215	11.6
All	8212782	1466853	9679635	17.8

Source: Researcher's compilation from various tables of yearly statistics book (Ministry of Labor, 2013).

In reality, not all positions occupied by non-Saudis in the private sector can be replaced using local employees because of some restrictions. Based on the workforce categories and level of skills, unemployed Saudis can also be categorized into three groups based on their level of education. The comparison between unemployed Saudis with different levels of education and foreigners employed in the private sector revealed very interesting results. The number of employed foreigners with high skills and with higher education was almost four times greater than the unemployed Saudis with the same level of education. Additionally, the number of employed skilled foreigners without higher education was more than ten times higher than the number of unemployed Saudis with tertiary education (Figure 1.3). Taking into consideration that the local workers have the priority for jobs and that they can replace foreigner workers whenever they have acquired the desirable competences and qualifications, there is no shortage in the labor market in terms of job creation, even in high-skill jobs that need certain qualifications. Thus, the current situation offers challenges as well as chances for Saudi HEIs to enhance their graduates' ability to fill these vacancies in such a fertile economy (see Figure 1.3).

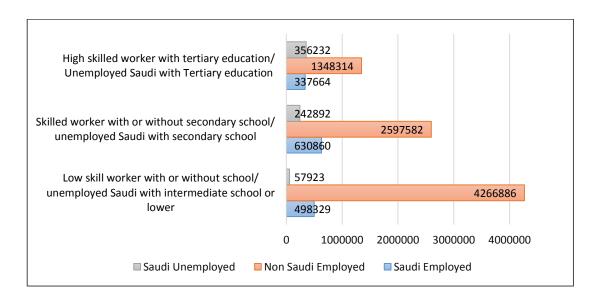


Figure 1.3 Employment and unemployment among Saudis and non-Saudis with different skills and education levels 2013–2014.

Source: Researcher compalition from various tables of yearly statistics book (Ministry of Labor, 2013).

Another challenge for HEIs in Saudi Arabia is how to maintain their internal stakeholders, including faculty members and administrative personnel, to enhance their service quality. Internal stakeholders are vital elements in communicating with external higher education stakeholders. Therefore, the quality of faculty members'

and administrative staff's jobs reflects on an institution's ability to attain excellence and achieve its targets. Taking into consideration that quality in HEIs in Saudi Arabia is not a matter of choice anymore because the Ministry of Higher Education has requested all HIEs comply with the standards of the NCAAA, faculty evaluation and development provide indicators of whether an institution is meeting the NCAAA quality standards. However, some faculty members have continued to teach in the same way they previously taught, ignoring the modern methods (Qureshi, 2006). Some universities have recognized this problem and established development deanships or centers to improve the quality of teaching. Nasruldin (1994) found the factors associated with job satisfaction for faculty members at three major universities were related to working environment and the method of selecting the heads of departments, deans, and faculty members, as well as the selection of faculty members for managerial tasks and positions. In this regard, Iqbal and Kokash (2011) suggested that the top management of HEIs should use regular communication and support to make even remote faculty feel part of the institution. Al-Ghamdi and Tight (2013:90) described the ideal way to evaluate and develop faculty members in Saudi HEIs:

It is, therefore, important for Saudi Arabia to have a comprehensive faculty evaluation system that employs multiple data sources and that collects relevant information throughout the evaluation cycle. The major data sources in most faculty evaluation systems are student ratings, self-evaluation, peer evaluation, and supervisor evaluation. The information collected through these sources needs to directly influence the nature of professional development if the overall educational performance of Saudi universities is to improve.

From one side, the above quotation supports the need for internal market orientation (IMO) in HEIs in Saudi Arabia through a robust process of information acquisition to respond in a timely fashion to the needs of employees in order to strive for quality. The other important side is the vital role of top managers in applying such internal orientation to maintain quality standards and requirements within institutions, which, in turn, will drive faculty members' and administrative staff's efforts to enhance institutional success.

Finally, another critical challenge of HEIs is how to reinforce the link between the outputs of knowledge and industry (Shine, 2009). The government of Saudi Arabia has introduced some initiatives to establish a collaboration between HEIs and some international research agencies and distinguished scholars. Chang et al. (2009) found that the more the country invests in research and development, the more academics publish quality research internationally. In turn, the output of Saudi researchers has increased rapidly in recent years, as the government has spent around 1.1% of its gross domestic product (GDP) on research and development. In 2010, Saudi scholars managed to publish 3,063 articles internationally, whereas they published only 25 articles a year decades ago. Although this improvement is noticeable, research activities in Saudi HEIs are still low when compared internationally. Moreover, the link between research carried out by HEIs and industry is not as strong as desirable. Therefore, a portion of private and public Saudi agencies relies on research done by overseas-based experts. In this regard, Shin, Lee, and Kim (2011: 311) stated that "we found that technological development was not based on scientific research in Saudi Arabia; rather, the technological development relies on prior technology." Prior research found some reasons behind that issue, including a lack of funding, encouragement, and facilities for researchers (Alzahrani, 2011). Additionally, Al-Ohali and Shin (2013) revealed other reasons related to Saudi researchers' capabilities such as a lack of engagement in market issues related to their areas, lack of confidence in exposing their contributions to international evaluations, and lack of English language competencies, as English is the dominant language of publication.

1.3 Problem Statement

There were at least four major problems underpinning the researcher's interest in investigating market orientation in the context of higher education in Saudi Arabia. First of all, as previously mentioned in the background section of this chapter, a current challenge for Saudi higher education institutions is the weak linkage between educational outputs and community demands (Dokhaikh, 2012; Achoui, 2009; Alshaer et al., 2003). Educational institutions have to tackle this

challenge in addition to the other contemporary challenges facing any other educational system in the world, such as globalization, commoditization, and competition (Maringe and Gibbs, 2009: Alkhazim, 2003). Additionally, HEIs in Saudi Arabia, as vital parts of the public sector, are growing in terms of the number of institutions, students, and employees, which, in turn, affects the quality of the outputs (Dokhaikh, 2012). Thus, the quality of higher education has become a consideration after decades of development. Tenth Development Plan called for the improvement of teaching competency and the continual monitoring of national and international bodies of accreditation (Ministry of Economy and Planning, 2014).

Although the higher education system has embraced some initiatives, the situation is getting worse in some areas. For instance, instead of following Afaq plan for excellence in higher education to accept as high as 70% of all secondary graduates in all HEIs, 95% of secondary graduates secured seats in HEIs in 2014, which will lead to an oversupply of graduates years later. Moreover, after acceptance, there is unbalanced distribution of accepted students in different disciplines among Saudi Arabian HEIs (Almaran, 2012). Alturkistani (1999) and Alshumaimery (2000) suggested that HEIs should consider an urgent remedy to change the acceptance policy in some disciplines. Supporting this, Viviano (2003) and Alamri (2011) mentioned that many young Saudis receive their bachelor degrees in Islamic studies and social sciences, both of which are viewed as irrelevant in the labor market (Figure 1.1). Additionally, higher education graduates suffer from a negative attitude about employers, especially in the private sector (Baqadir, Patrick, and Burns, 2011). At the same time, graduates' career expectations are higher than the positions found in the labor market. Therefore, there is noticeable mismatch between job seekers and providers. Alasfor and Khan (2013) noted that some job seekers look for upper to middle position after their graduation. Therefore, Saudi Arabia chronically suffers from unemployment among qualified individuals (Al-Mubaraki, 2011). According to the Ministry of Labor, the number of unemployed Saudis increased by 5.3% in the first half of 2014. The total number of unemployed Saudis increased to 657,047 by mid-2014 compared to 622,533 at the end of 2013 (Figure 1.2).

The other main output of higher education institutions is the research carried out by faculty members or researchers in response to certain community demands. In Saudi Arabia, there is a considerable lack of research competences among researchers due to funding, encouragement, and facilities for research (Alzahrani, 2011). Additionally, Al-Ohali and Shin (2013) revealed other reasons related to Saudi researchers' capabilities such as a lack of engagement in market issues related to their areas, lack of confidence in exposing their contributions to international evaluations, and lack of English language competencies. This situation definitely opens the grounds for debate about the useful strategies that could fill the gap between community expectations and educational yields, particularly the role of market orientation as a successful strategy in business and nonbusiness arenas. Thus, the lack of market orientation in higher education institutions in Saudi Arabia has affected their ability to strengthen the linkage between their outputs and community demands.

Secondly, there is a lack of research investigating market orientation in the context of higher education with the combination of both internal and external stakeholders simultaneously. In this regard, arguments have been made pertaining to the critical role of organizational strategic orientation, especially market orientation, to enhance alignment to market and support sustainability, customer satisfaction, and profitability in business sector firms. Higher education institutions and other public and nonbusiness sector organizations have applied business strategies to deal with emerging challenges and transitions (Kotler and Levy, 1969; Pitt, Caruana, and Berthon, 1996; Gamble, Gilmore, McCartan-Quinn, and Durkan, 2011). Although trade in higher education has been intensified by the rapid growth of newly established private and public universities and colleges in the Middle East, North Africa, and Southeast Asia (Shaw, 2005), generally HEIs in developing countries are still product oriented (Nicolcuse, 2009). However, the literature on MO in the HEI context is not as abundant as in business, which has mainly focused on HEIs of private ownership, perhaps due to their similarity to the business sector. Thus, the mainstream research on MO in the higher education context has addressed private universities' issues (Caruana, Ramaseshan, and Ewing, 1998; Flavián, Longás, and Lozano, 2011; Flavián and Lozano, 2008; Küster and Avilés-Valenzuela, 2010; Webster, Hammond, and Rothwell, 2010). Additionally, the majority of prior research was based on the prior efforts of Narver and Slater (1990) and Kohli and Jaworski (1990). Hence, this gap enhanced the researcher's interest to include a new set of variables that depend on prior research and customize them to be in line with the higher education context in Saudi Arabia.

Moreover, the literature on higher education has no consensus about HEI customers due to the relatively broad spectrum of beneficiaries. Additionally, HEIs are known to have multiple customers and multiple products (Jeremy, Abigail, and Robin, 2000). Thus, identifying primary stakeholders and applying a consistent strategy to deal with them is crucial for HEIs (Tetřevová and Sabolová, 2010). Because the typical final output or "product" of any HE system is graduates, employers of those graduates have been considered the customers or consumers of HEIs' product (Kotler and Fox, 1995; Nicolescu and Paun, 2009). Employers are divergent in their needs relating to competences, skills, and readiness to work. The gap between graduates' capabilities to fill positions and employers' requirements is usually, arguably, between graduates, employers, and HEIs (Nicolescu and Paun, 2009). The National Institute of Standards and Technology (NIST; 2010) and AACSB (2011) also recognize employers of graduates as HEI customers. As mentioned above, HEIs in Saudi Arabia have suffered from low employability of their graduates (Dokhaikh, 2012), particularly in the private sector, where competition is open to foreigner workers. Employer orientation as part of MO seems to be vital for Saudi Arabian HEIs due to its role in improving graduates' employability and employers' satisfaction. However, there has only been one study by Webster, Hammond, and Rothwell (2010) that considered the employer in the construct of MO, though without considering the influence of MO on employability as HEIs' key performance indicator. Therefore, this researcher decided to fill this gap by adding the dimension of employer orientation to the construct of MO, as employers of graduates are vital stakeholders in any higher education system. To sum up this point, there were four external MO components included in this research, namely, student orientation, employer of graduates' orientation, competitor orientation, and interfunctional coordination. Hence, MO applications depend, mainly, on generating information about a well-defined set of stakeholders and distributing this intelligence through departments, supporting managers, and functions to achieve adequate awareness about customers' and other stakeholders' needs in order to take proper action.

The third problem that prompted the researcher to explore this phenomena is related to the role of antecedents of market orientation in higher education institutions. Faculty members in Saudi higher education face some problems that degrade their ability to contribute to their institutions' performance. On the one hand, their capability to transfer knowledge using technological innovation is less than the pace in the country's development (Salamah, 2006; Qureshi, 2006). On the other hand, HEIs' policy to retain and develop faculty members is not at a satisfying level. Employee turnover is common among Saudi higher education members (Almeth-hib, 1998). HEIs lack management awareness in terms of human resource practices and developing retention strategies. Some organizations do not have retention strategies for either Saudi or non-Saudi faculties. Garcia (2015:381) found that HEIs suffer from "weak retention practices . . . [and] all of the established retention factors, which include compensation and benefits, employee engagement, performance management, retention measures, and career development," and he suggested " an extensive review and modification of many administrative procedures which are supposedly geared towards people management" (Garcia, 2015:381). Therefore, to achieve performance excellence in HEIs, Voon (2007) suggested faculty members should be enthusiastic in performing their jobs and have high academic capability to transfer quality knowledge to students and to engage in innovative and original research. Internal marketing refers to the culture of satisfying customers' needs and wants through satisfying and encouraging employees, not just using them as direct promoters for institutions (Ahmed and Rafiq, 2002). In this regard, Küster and Avilés-Valenzuela (2010) suggested internal marketing as an inbound tactic for each level of managers to treat the lower levels in the institution until reaching faculty members who interact directly with the institutions' clients. Market orientation proposes to look after current customers' needs and wants and generate information on latent and expressed needs for current and future customers, as well as to disseminate and react wisely to this information. Hence, HEIs' orientation toward their external stakeholders obscures their ability to treat their employees as internal customers to ensure they are able to convey high standards of teaching and researching products. Prior research has totally ignored the potential effect of internal MO to enhance HEIs' ability to be market oriented externally. Consequently, the aim of this research is to include the employees of HEIs as a vital element of the total quality of higher education in general and as a booster for institutional orientation.

Additionally, building on the upper echelons theory, the role of top managers in HEIs to embrace market-oriented strategy has not been tested intensively in the literature. Hammond, Webster, and Harmon (2006) found that top management emphasis significantly affected the extent of HEIs' orientation toward their beneficiaries in the USA. Another study conducted among Spanish public universities suggested that the level of MO applied by professors in marketing disciplines was influenced by the amount of managers' emphasis toward university stakeholders (Flavián and Lozano, 2006). The overriding conclusion from the aforementioned literature is that leadership is vital to achieving and maintaining a successful culture of change in an organization.

The last issue that contributes to the higher education's lack of ability to cope with temporary local and international challenges that incentivized the researcher to explore this topic is the lack of innovativeness. Embracing innovation in different Saudi Arabian sectors is a national requirement for sustainability and growth. According to the Ministry of Economy and Planning (2013: p11), "Transforming into a knowledge society involves the increased importance of knowledge and innovation's role". Education strategy in the country focused on education and innovation as vital capacities to enhance human capital productivity and creativity. Consequently, policy makers in the country have recognized education as a critical enabler for a knowledge-based economy (Ministry of Economy and Planning, 2014). In order to align the efforts of HEIs to support the national transition to a knowledge society, the Ministry of Higher Education is carrying out long-term plan called Afaq which means "horizon" in Arabic. The first detailed five-year action plan contains the encouragement of innovation and productivity among students, teachers, and managers. Additionally, some innovative initiatives have been launched to cope with

current challenges in higher education and the whole economy. As an example of such innovative initiatives for establishing new types of universities, King Abdullah University for Science and Technology as established to be an international research Another example of an innovative initiative that overcame one of challenges facing the HEIs in the country was the establishment of Saudi Electronic University to provide only distance learning in different disciplines to face the high demand for part-time higher education and distance learning. In fact, innovation is crucial for all academic disciplines when encountering new regulations and changes in community demands, especially in medical education (Telmesani, Zaini, and Ghazi, 2011). Telmesani, Zaini, and Ghazi (2011) pointed to the innovations in teaching in medical colleges as a means of developing medical education in the country after the huge expansion of HEIs with a slow reform pace. However, even with those initiatives and ambitious plans to become a knowledge-based society, Saudi Arabia was ranked 41st, and its innovation output index was low at 98th place, according to the global innovation index (Iqbal, 2011). Furthermore, the country placed 126th in innovation efficiency, which represents the ability to transform innovation enablers into innovation success. Thus, while Saudi Arabia has made many investments over the years to improve innovation, policy makers have to increase efforts to spread an innovative culture among Saudi communities (Iqbal, 2011), particularly in HEIs.

Higher education institutions are undergoing a cultural transformation to play a significant role in the knowledge-based society as entrepreneurs and in promoting economic development. Innovation is a vital characteristic of entrepreneurial orientation (Lumpkin and Dess, 1996). Therefore, Etzkowitz and Zhou (2007:2) suggest that entrepreneurial universities' aim at "more than the creation of an interface mechanism between university and industry and play a diverse role in university-pushed, government-pulled, and corporate-led innovation." Furthermore, the entrepreneurial university has the capacity to complete a circulation of trilateral cooperation between academia, industry, and government (Li-Hua *et al.*, 2011). In this regard, the existence of a resource-based view (RBV) in strategic orientation was debated previously (Hult *et al.*, 2007; Connor, 2007). Atuahene-Gima (2005) pronounced that MO enables the utilization of innovation competencies. Thus, taking

into consideration the potential effect of innovativeness on performance, this research employed resource-based theory as a base for explaining the effect of complementary resources in channeling the relationship between MO and performance. Additionally, there have been no empirical studies on the relationships between market orientation, innovativeness, and performance in the context of higher education. Consequently, this research takes a fresh approach using the Saudi Arabian higher education context to assess the role of innovativeness as a mediator of the potential influence of MO on institutions' outcomes.

In conclusion, although the link between MO and organizational performance has been studied extensively, minimal effort has been given to investigating the effect of MO on HEI outcomes. To date, no single study exists that adequately examines the significance of top management emphasis on IMO and MO in a higher education context. Furthermore, the potential role of IMO to enhance MO included in this research is necessary to fill the gap in the literature. The role of internal as well as external stakeholders has been included to enhance the uniqueness of this research. Employer orientation as a vital stakeholder of HEIs has been ignored in most prior research as a component of MO. The role of MO on HEI outcomes has been investigated directly and mediated by innovativeness. This research mainly was conducted in Saudi Arabian HEIs, which represent both public and private institutions. Hence, according to the gaps found in the MO literature and based on the weak link between HEIs' outputs and their stakeholders' demands as well as the high cost of unresolved consequences, this research proposed internal as well as external market orientation preceded by top management emphasis and followed by innovativeness to enhance institutions' ability to satisfy various stakeholders' needs.

The following sections demonstrate the questions and objectives that guided the investigation throughout the research.

1.4 Research Objectives

This research aimed to fill the gap in the literature on strategic marketing and higher education management. Accordingly, this research in the higher education sector in a developing country like Saudi Arabia attempted to explicitly focus on the role of MO in the nonbusiness sphere. In fact, the aim of this research was to measure different relationships among the seven main constructs, which are top management emphasis, internal market orientation, market orientation, innovativeness, graduates' perceived employability, perceived research performance, and overall performance. Consequentially, this research permitted better understanding of the dynamic and the power of applying business-like approaches to a different arena. In other words, academic managers can use marketing strategies to deal with multistakeholder institutions of higher education and to face the challenge of being open to their communities.

In light of the issues stated at the beginning of this chapter, this research studied the relationship between MO and higher education institutions' outputs channeled through innovativeness and preceded by IMO and top management emphasis as antecedents. Therefore, the current research addressed the following specific objectives:

- **1.** To examine the relationship between top management emphasis and internal market orientation in higher education institutions in Saudi Arabia.
- **2.** To assess the relationship between top management emphasis and market orientation in higher education institutions in Saudi Arabia.
- **3.** To examine the relationship between internal market orientation and market orientation in higher education institutions in Saudi Arabia.
- **4.** To assess the relationship between internal market orientation and perceived performance (graduates' employability, research performance, and overall performance) in higher education institutions in Saudi Arabia.

- **5.** To assess the relationship between market orientation and perceived performance (graduates' employability, research performance, and overall performance) in higher education institutions in Saudi Arabia.
- **6.** To examine the mediating effect of innovativeness on the relationship between market orientation and perceived performance in the context of higher education institutions in Saudi Arabia from the three aspects of graduates' employability, research performance, and overall performance.
- 7. To assess statistically the differences between internal market orientation and market orientation in higher education institutions in Saudi Arabia based on an institution's type (public/private), size (current students number), overwhelming discipline, local accreditation, and international accreditation.

1.5 Research Questions

In light of the research objectives, research questions were designed to be answered precisely by the end of this research. They were built to determine the various relationships in the research and to guide the discussion throughout the thesis. In this regard, this research sought to answer seven specific questions, as follow:

- **RQ1** Does top management emphasis on market orientation have a significant and positive relationship with internal market orientation in higher education institutions in Saudi Arabia?
- **RQ2** Does top management emphasis on market orientation have a significant and positive relationship with market orientation in higher education institutions in Saudi Arabia?
- **RQ3** Does internal market orientation have a significant and positive relationship with market orientation in higher education institutions in Saudi Arabia?
- RQ4 Does internal market orientation have a significant and positive relationship with the perceived performance (i.e., graduates' employability, research performance, and overall performance) of higher education institutions in Saudi Arabia?

- RQ5 Does market orientation have a significant and positive relationship with the perceived performance (i.e., graduates' employability, research performance, and overall performance) of higher education institutions in Saudi Arabia?
- **RQ6** Does innovativeness mediate the relationship between market orientation and perceived performance (i.e., graduates' employability, research performance, and overall performance)?
- **RQ7** Do higher education institutions in Saudi Arabia statistically differ in their degree of internal market orientation or market orientation based on their demographic specifications?

1.6 Significance of the Research

This research provided a comprehensive investigation of market orientation in the context of higher education in Saudi Arabia. This research extended the construct of MO to a nonbusiness environment and combined its effect with innovativeness as a mediated variable. Moreover, top managers' role was investigated as an antecedent to internal and external MO. In fact, this research contributed to theory, methodology, and practice in order to understand the association between MO and higher education institutions' performance. The following subsections are dedicated to illustrating the significance of this research.

1.6.1 Theoretical significance

This is the first attempt to investigate market orientation in the context of higher education in Saudi Arabia. There have been a few studies that focused on applying marketing approaches to solve higher education issues; however, this research expanded the construct of market orientation to combine different stakeholders, namely students, employers of graduates, and competitors. This research yielded considerable improvements to the literature on market orientation by using internal market orientation and top management emphasis as antecedents

using the basis of the upper echelons theory to relate top managers' commitment to their strategic decisions regarding their internal and external stakeholders.

Additionally, this research contributes to the theory by employing a complementary resource—innovativeness—to explain the effect of market orientation on higher education institutions' performance. Innovativeness is the ability and capability of institutions to use new techniques to cope with contemporary issues of higher education such as competition, massification, and internationalization.

By investigating MO in the context of higher education in Saudi Arabia, this research added to the body of knowledge by elaborating on the construct of customer orientation to include two vital stakeholders (students and graduates' employers) as subdimensions. Moreover, the researcher examined the role of IMO in enhancing MO and its impact on HEIs' perceived performance in Saudi Arabia. This impact was assessed directly and via innovation as a mediator. Furthermore, the research provided a synthesized model for MO using both cultural and behavioral perspectives; the latter impeded implicitly.

1.6.2 Methodological significance

Because of the potential benefits of using a Web-based survey with respect to saving time, effort, and money, the researcher employed a Web-based survey to exploit the chances of reaching approximately six hundred HEIs distributed throughout the large country of Saudi Arabia, i.e., total area 2,250,000 km². Hence, the researcher utilized a Web-based data collection tool. This method allowed the researcher to study the whole population given the benefits of this approach and the obvious plausibility of surveying whole population. Census or targeting of an entire population is useful for minimizing random sampling error, selection bias, and nonresponse bias (Daniel, 2011).

1.6.3 Practical significance

Higher education institutions are not isolated from the world challenges that face business and nonbusiness organizations alike, including increasing competition in the marketplace, internationalization and globalization of higher education institutional reputation, and branding (Maringe and Gibbs, 2008; Kotler, 2005). However, so far little attention has been given to investigating MO in the context of higher education. Additionally, few studies have attempted to provide MO constructs dedicated to the higher education context. Those dimensions or components of MO constructs that were investigated in prior research were not sufficient because of the exclusion of vital stakeholders, such as the employers of graduates.

Accordingly, academic leaders can use this research to see a clear picture of the actual situation. Furthermore, professionals will be able to use the scale of IMO and MO to assess their degree of orientation toward the market. This research provides a practical recommendation to the decision makers of HEIs in Saudi Arabia as they strive to achieve local and international accreditation; measuring internal and external MO may help higher education managers assess their eligibility and capacity to do so. Moreover, practitioners of marketing in HEIs will also find the results of this research useful to guide their response toward the emerging challenges of globalization and commoditization of higher education.

1.7 Scope of the Research

There are several issues addressed in this research. First, the research was conducted among Saudi Arabian HEIs under the supervision of the Ministry of Higher Education in Saudi Arabia. This research excluded the military and vocational higher education institutes. Secondly, this research used a quantitative method for collecting and analyzing data. The total research population included 537 institutions. Simple, random sampling techniques were employed to choose participants. An online-based questionnaire was distributed to collect the data. The

research focused on measuring both IMO and MO in the context of higher education in Saudi Arabia using existing and well-established constructs found in the literature regarding MO. Market orientation constructs comprise the three major stakeholders of higher education in Saudi Arabia. The components of MO constructs are student orientation, employer orientation, competitor orientation, and efforts coordination. Internal market orientation represents the orientation toward internal customers, which is equal to employee orientation. These dimensions were measured by adopting prior scales found in the literature on MO for higher education (Caruana, Ramaseshan, and Ewing, 1998; Flavián and Lozano, 2006, 2008; Hemsley-Brown and Oplatka, 2010; Lings, 2004; Ma and Todorovic, 2011; Rivera-Camino and Ayala, 2010; Voon, 2008; Webster and Hammond, 2008). Moreover, this research assessed the role of top management emphasis in enhancing institutional MO. The role of IMO in influencing MO was examined as well. Additionally, this research examined the effect of MO on HEIs' perceived performance in research, graduate employability, and overall performance. Furthermore, the research examined the mediating role of innovativeness on the proposed direct effect of MO on perceived performance.

1.8 Structure of the Research

This research is divided into five chapters. Chapter one introduced the research and presented the problem statement, research objectives, research questions, and scope and significance of the research. Chapter two addresses the literature review on the research topic. It begins with presenting a general discussion of marketing concept development in the emergence of MO in the marketing literature. Next, the chapter provides an overview of MO perspectives in business as well as in the context of HEIs. The chapter includes a discussion on the conceptual framework of the research, hypotheses development, and research model. This is followed by chapter three, which addresses the research methodology, including the research design, sampling strategies, data collection, questionnaire development, distribution, and data analysis techniques. Chapter four focuses on data analysis and

results. Finally, chapter five offers a conclusion of the research results, contributions, limitations, and recommendations for future research.

1.9 Key Terms

This research benefits from various theories and concepts. To facilitate the reader's understanding of this research, this section illustrates both conceptual and operational terms that might need more explanation as they are used in the research.

1.9.1 Marketing Concept

Marketing concept appeared in the mid-1950s and developed gradually in the management literature. This evolution process started with the production era, then the product concept era, and finally, the sales era. Eventually, the marketing concept era matured and became the base for MO. Marketing concept was defined by Felton (1959:55) as "a corporate state of mind that insists on the integration and coordination of all marketing functions which, in turn, are melded with other corporate functions for the basic objective of producing maximum long-range corporate profits." Kotler and Keller (2009) asserted that marketing concept was achieved by the ability to have control over the following four important aspects: target market, customer needs, integrated marketing, and profitability. Deshpandé and Farley (1998), Kohli and Jaworski (1990), and other scholars found that achieving superior performance was strongly related to applying marketing concept. Throughout this research, the term marketing concept is used to refer to the philosophy that places customer needs and wants as a priority and includes the concept of profit making. Additionally, the research considers marketing concept as the base for various MO perspectives.

1.9.2 Market Orientation

In the plethora of marketing literature, there is no consensus on one united definition of MO (Gainer and Padanyi, 2005; Kohli and Jaworski, 1990; Narver and Slater, 1990b). Accordingly, researchers used to embrace two major perspectives. The cultural perspective of MO was defined by Kohli and Jaworski (1996:131) "as the organization-wide generation of market intelligence pertaining to customers, competitors, and forces affecting them, internal dissemination of the intelligence, and reactive as well as proactive responsiveness to the intelligence," and emphasized market intelligence as a broad construct that can be generated from internal and external sources. On the other hand, the behavioral perspective of MO was defined by Narver and Slater (1990:20) as "the business culture that most effectively and efficiently creates superior value for customers' orientation, competitor orientation and inter-functional coordination—and two decision criteria, long-term focus and profitability."

Hence, this research in the context of HEIs synthesized both approaches and defined MO as the institution-wide generation of market intelligence pertaining to different stakeholders such as students, employers of graduates, and competitors, as well as the act of disseminating intelligence and measuring the reactive as well as the proactive responsiveness to the intelligence aiming to enhance current and future objectives in an interfunctional coordination manner.

1.9.3 Market Orientation Construct

In this research, external MO consisted of four subconstructs, namely, student orientation, graduate employer orientation, competitor orientation, and interfunctional coordination. First, student orientation refers to institution-wide practices that put student interests first as the center for all institutional activities, yet while not excluding those of all other stakeholders. This occurs through information generation, dissemination, and responsiveness to develop a well-trusted HEI. Second,

graduate employer orientation refers to information generation, dissemination, and responsiveness pertaining to current and potential employers of graduate students in order to enhance students' employability and pursue a good reputation among employers that consume the outputs of graduates, research, and training programs. Third, competitor orientation refers to information generation, dissemination, and responsiveness pertaining to current and potential competitors in order to be proactive in designing and providing services that satisfy clients and other stakeholders (students, employees, and employers of graduates). Finally, interfunctional coordination refers to the approach for coordinating different functions to serve united objectives (Deshpande and Farley, 2004; Slater and Narver, 1996). Operationally, those constructs were derived from prior research on HEIs (Caruana, Ramaseshan and Ewing., 1998; Webster and Hammond, 2008; Flavian and Lozano, 2006, 2007; Camino and Ayala, 2010; Brown and Oplatka, 2010; Webster and Hammond, 2008; Hampton *et al.*, 2009; Sorensen, 2009; Voon, 2008).

1.9.4 Internal Market Orientation

In the literature on marketing there are two main concepts that concern internal customers or stakeholders: internal market orientation and internal marketing. Marketing and human resource scholars follow marketing pioneers by adopting the concept to their area. In line with that, Lings (2004:409) admitted that IMO "reflects a similar concept to external MO 'information generation, internal communications and internal responsiveness." Internal marketing concepts, according to Rafiq and Ahmed (2002:xvii) are "a planned effort using a marketing-like approach directed at motivating employees, for implementing and integrating organizational strategies towards customer orientation." The two concepts reflect different areas of marketing. Internal market orientation usually refers to the initial actions of information gathering about internal stakeholders' needs and wants in order to take the proper actions to satisfy them, whereas internal marketing is related to the same actions of marketing but dedicated to internal customers, i.e., employees. This study will adapt the concept of IMO by Lings (2004) and Lings and Greenley (2005), which is about identifying and satisfying the wants and needs of employees

as a prerequisite to satisfying the wants and needs of customers. Operationally, the construct of IMO was adopted from Lings and Greenley (2005).

1.9.5 Innovativeness

O'Sullivan and Dooley (2008) define innovation as "the process of making changes, large or small, radical or incremental, to products, processes, and services that result in the introduction of something new for the organization that adds value to customers and contributes to the knowledge store of the organization." Recently, Tot (2012:20) defined innovation management as "the management of all the activities involved in the process of idea generation, technology development, manufacturing and marketing of a new (or improved) product or manufacturing process or equipment." He noted that there were several types of innovation, including 1) product innovation, 2) process innovation, 3) organizational innovation, 4) management innovation, 5) production innovation, 6) marketing innovation, and 7) service innovation. Operationally, in this research innovation is defined as the openness to new ideas and the propensity to change. Although scholars have given different definitions of innovation depending on their perspectives, they agreed that "openness to new ideas and propensity to and acceptance of change" was a common attribute of innovative organizations (Baregheh, Rowley, and Sambrook, 2009). To measure innovativeness in this research, an eight-item scale was adopted from Zhang and Duan (2010) and Medina and Rufín (2009). All items were reworded to be more consistent within the context of HEIs.

1.9.6 Perceived Performance Indicators

Three perceived and one achieved performance indicator were measured in this research. Firstly, perceived teaching performance measures HEI managers' perceptions about faculty members' teaching performance. Secondly, research performance refers to HEI managers' perceptions of faculty research performance in terms of quantity and quality. Thirdly, employability of graduates' performance refers to HEI managers' perceptions about the ability of their graduates to secure a position in the labor market. Finally, prestige performance is the current situation of the institution in terms of accreditation issued by either local or international agencies and/or the appearance of an institution or one of its programs in a global HEI ranking, if applicable.

1.9.7 Higher Education Institutions

Higher education institutions in this research refer to the faculties, colleges, or schools that provide tertiary education in Saudi Arabia, whether public or private and whether under a mother university or not. This research exclusively investigated institutions under the supervision of the Ministry of Higher Education. Each institution has a minimum level of autonomy and its own management that control its major operations. However, some of these institutions are operating under one another university that hierarchically coordinates them to achieve their broad goals.

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