**UNIVERSITY OF SOUTHAMPTON**

FACULTY OF BUSINESS AND LAW

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# Performance Measurement Systems in Two Saudi Arabian Government Universities: A Grounded Theory Study

by

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# ABSTRACT

In recent years, reform of the higher education sector has been a major focus for policy makers and academic researchers. From the academic perspective, a great deal of literature on the area of public sector reform has been published and there have also been many seminars and workshops around the world dealing with this issue. Accounting systems and policies have played a central role in initiatives for change.

This research investigates the development and usage of performance measurement systems in two Saudi Arabian public universities and attempts to highlight the factors that influence the implementation of these systems. Therefore, the overall aims and objectives of the research are: 1) to acquire empirical knowledge of performance measurement systems in Saudi universities, 2) to understand the relationship between performance measurement systems and macro and micro conditions, 3) to develop a theoretical understanding of these phenomena, and 4) to suggest practical improvements to performance measurement systems in Saudi universities.

Thus, the research is concerned with developing an understanding of the way in which people perceive and communicate these issues in the context of everyday life within organisations. To achieve this, the research undertaken adopted an interpretive approach in general, and a grounded theory Strauss and Corbin (1998) approach in particular. This method was used in order to generate a theory that is "grounded" in data obtained during the study, particularly in the actions, interactions and process of the people involved. The researcher made several visits to the research sites to collect data. The data was then analysed between visits; this process continued until diminishing returns were achieved. This approach has proved useful in linking perceptions to actions and also in developing a contextualised theory from the data collected (Strauss and Corbin, 1998).

The research has resulted in a substantive grounded theory interpreting the central phenomenon of the conflicting demands of legitimacy and autonomy seeking and, further, how this core phenomenon is influenced by macro and micro conditions within the Saudi environment. The interactions between the central phenomenon and the micro conditions have consequently resulted in differences in how performance measurement systems in the two universities are perceived and used.

# TABLE OF Contents

# LIST OF FIGURES

# List of tables

# DECLARATION OF AUTHORSHIP

I, Ali Mohammed Aseeri

declare that the thesis entitled

Performance Measurement Systems in Saudi Arabian Universities: A Grounded Theory Study

and the work presented in the thesis are both my own and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- none of this work has been published before submission

Signed: ……..

Date:…….

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# CHAPTER 1: INTRODUCTION

## 1.1 Background to the study

This research is a grounded theory study of the performance measurement systems within two Saudi Arabian public universities. In recent years, reform of the public sector in the UK and further afield has been a major focus for policy makers and academics. From the academic perspective, a great deal of literature on the area of public sector reform has been published and there have also been many seminars and workshops around the world dealing with this issue. This is often included in the New Public Management debate (Hood, 1995). However, little research has hitherto concentrated on understanding the context of performance management in practice (Broad *et al.,* 2007).

Accounting systems and policies have played a central role in initiatives for change; one of the main contributions made by management accounting is the introduction of new performance measurement systems (Kaplan and Norton, 1996). Performance measurement systems have attracted a great deal of debate in the private sector but less so in the public sector and in developing countries, such as the Kingdom of Saudi Arabia. Within Saudi Arabia, a series of reform projects has attempted to introduce the notion of performance measurement systems in the public sector over the last decade.

## 1.2 Significance of the study

There has been a call for more contextual understandings of public sector accounting in unexplored settings (Broadbent, 1999). Universities, in particular, are important settings in which little research has been undertaken examining the phenomenon of performance measurement systems (Broad and Goddard, 2010). This lack of research is more obvious in the context of developing countries (Waal, 2007). Cultural and environmental issues can be major sources of differences and may provide a good testing ground for the concept of performance measurement.

Diversification of research approaches in accounting studies is also a factor in increasing the significance of this research. Studies have called for research that focuses on generating accounting theory, which can make a more practical contribution (Tomkins, 1999; Guthrie and Parker, 2004).

## 1.3 Research objectives and questions

This research examines the concept of performance measurement systems in two case universities in Saudi Arabia. Its aims are: 1) to acquire empirical knowledge of performance measurement systems in the studied Saudi universities and develop a theoretical understanding of the phenomena under investigation, 2) to understand the relationship between performance measurement systems and contextual factors, and 3) to suggest practical improvements to performance measurement systems in the two Saudi universities.

In pursuit of the above goals, the research seeks mainly to identify the theory that best explains the experience of performance measurement system use in the Saudi universities studied. This aim can be divided into the following questions:

1) What is the perceived role of performance measurement systems in the two Saudi universities? How are they used?
2) What factors appear to affect the way in which performance measurement systems are practised?
3) What differences in these phenomena exist between different cases and why?
4) What further developments might be useful?

## 1.4 Research methodology

This research recognises that organisations are complex and that social interactions shape the manner in which phenomena are manifest. The interpretative approach offered by grounded theory enables the researcher to understand each phenomenon as it is experienced, through knowledge of the prior literature and detailed interviews (Parker and Roffey, 1997; Goddard 2005). Thus, discovery of the views of two Saudi universities' participants on performance measurement systems emerges from the research to help shape a nascent theory rather than to test a specific hypothesis. The research is concerned with developing an understanding of the way in which people perceive and communicate these issues in the context of their everyday lives within the organisations selected for this study. To achieve this, the research undertaken uses an interpretive approach, which is particularly helpful for developing theoretical understanding as well as empirical knowledge.

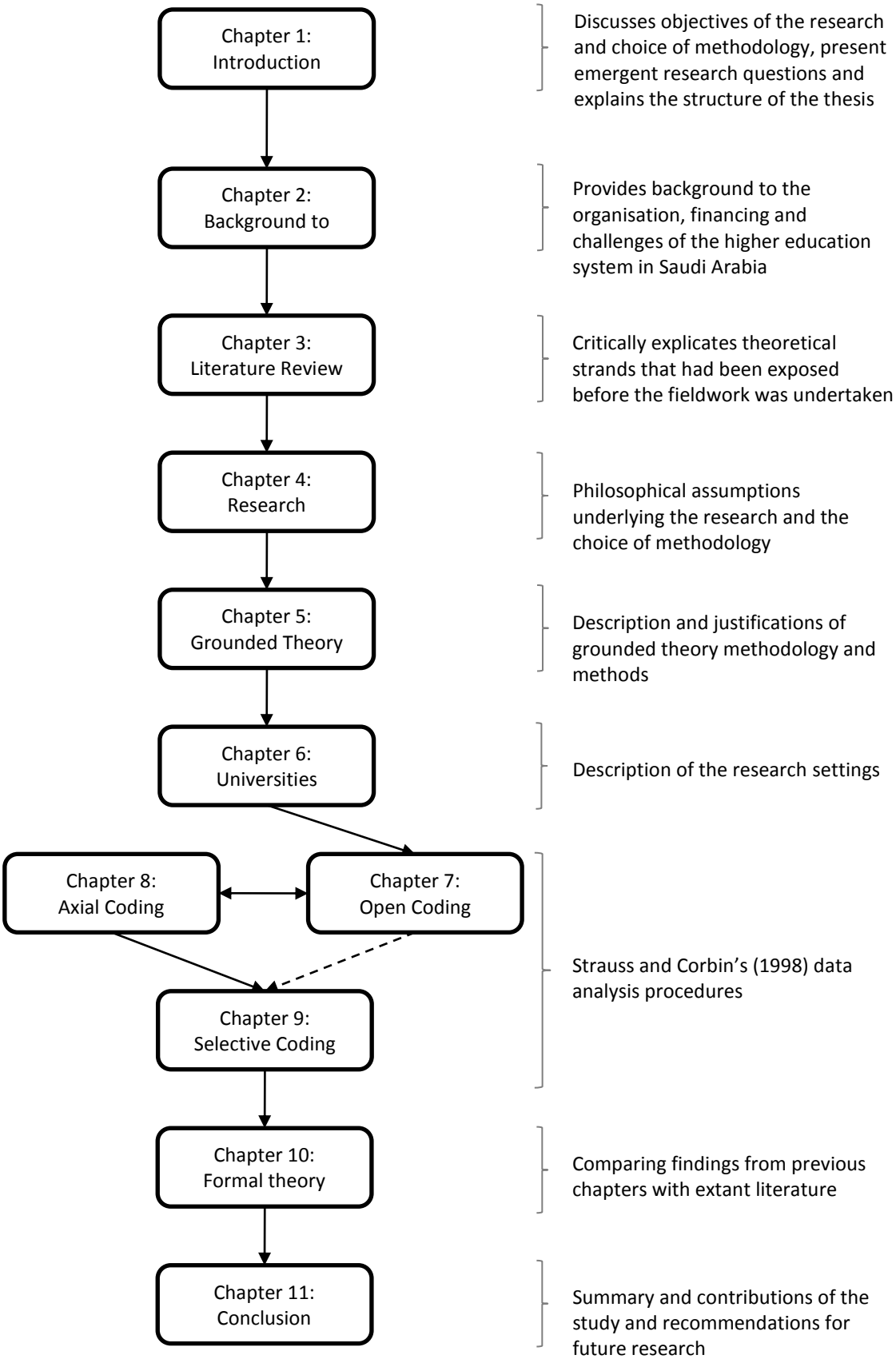
## 1.5 Structure of the thesis

In addition to this chapter, the thesis is divided into ten further chapters. Chapter 2 provides a background to the higher education sector in Saudi Arabia, including a short historical review of the development stages of Saudi higher education, the objectives and structure of the sector, a brief account of the Saudi universities and their budgeting system and, lastly, challenges and plans for the Saudi higher education sector. Chapter 3 reviews the accounting literature on performance measurement systems. The review begins with a brief explanation of the use of literature in grounded theory studies and provides definitions of the concept of performance measurement. It then illustrates the historical development of performance measurement systems and explains a number of contemporary performance measurement models. The implementation of performance measurement systems in the public sector in general, and the higher education in particular, is also discussed. The chapter is summarised with an outline of the main theoretical gap, which is used to build the research objectives.

Chapter 4 clarifies the philosophical assumptions underlying this study. The chapter discusses different paradigms in accounting research. It then highlights the paradigmatic debate and justifies the choice of interpretive paradigm. Chapter 5 describes the methodology that has been used to meet the goals of the study starting with grounded theory itself, including its origins and extensions, recent debates regarding this methodology and a review of grounded theory within accounting research. It moves on to discuss the data collection process and, finally, the data analysis process. Chapter 6 provides a description of the research settings, including a background to the universities studied and their respective organisational structures and strategies.

Chapters 7, 8 and 9 describes the Strauss and Corbin (1998) analysis procedures used in this study, which include the open, axial and selective coding stages. Chapter 10 compares the findings contained in previous chapters with those made in the extant literature. Chapter 11 concludes with a summary of the study and its contributions to existing knowledge, together with recommendations for future research.

**Figure 1-1: Thesis structure**



# CHAPTER 2: HIGHER EDUCATION IN SAUDI ARABIA

## 2.1 Introduction

During the last three decades, the higher education sector in the Kingdom of Saudi Arabia has gone through several stages of development. This sector is affected by its contextual environment and faced a number of serious challenges that have shaped its current status. This chapter provides a detailed overview of the sector. Section 2.2 presents information about Saudi Arabia in order to highlight certain environmental issues related to higher education. Section 2.3 illustrates the roots of Saudi higher education and identifies several significant events. A definition of higher education and a set of objectives are provided in section 2.4. Section 2.5 describes the sector's organisation and decision-making system. Classification and an overview of Saudi universities are provided by section 2.6. Section 2.7 explains the financing system and illustrates the current challenges confronting higher education providers. This chapter ends with an explanation of the 25-year plan for Saudi university education.

## 2.2 Saudi Arabia

The Kingdom of Saudi Arabia is located in the South West of Asia, occupying an area of 2.15 million square kilometres. As shown in figure 2.1, Saudi Arabia borders with Jordan and Iraq in the north, Kuwait, Bahrain, Qatar and United Arab Emirates in the east, Oman and Yemen in the south and the Red Sea in the west. It consists of 13 provinces: Al Bahah, Northern Border, Al Jawf, Al Madinah, Al Qasim, Ha'il, Asir, Eastern Province, Al Riyadh, Tabuk, Najran, Makkah and Jazan (Ministry of Planning and Economy, 1999). In 2008, the population was estimated at 28,161,417, of which approximately 5,576,076 were non-nationals (CIA, 2008). Males account for 54.3% of the population; more than half is below 20 years of age (Ministry of Planning and Economy, 1999). The Saudi economy is based largely on crude oil production and exports 12 million barrels each day, making it the biggest oil exporter in the world. In 2008, the average monthly GDP per capita was estimated at approximately $1574 (Ministry of Planning and Economy, 2008).

**2-1: Map of Saudi Arabia**


## 2.3 Historical background

For centuries, Kuttabs[1] were the main form of education in most Arab countries in general and in Saudi Arabia in particular, remaining popular within the country until a century ago (Alghafis, 1992). The objective of these schools was to teach students how to memorise the Quran and other religious texts. They aimed also to teach writing and arithmetic to both genders. In 1925, shortly after King Abdulaziz unified the state, a more formal approach was introduced for education as a Directorate of Education was created and, further, a number of schools were established (Rugh, 2002). In 1938, the Directorate took control of all educational matters in the Kingdom, including higher education, with the exception of military academies. In 1953, the Directorate became the Ministry of Education (Rugh, 2002).

[1] Kuttabs are the Islamic schools attached to mosques. They started with the beginning of Islam and they usually consist of one teacher, with an advanced student acting as an assistant (Saleh, 1986)

The concept of higher education in Saudi Arabia began with initiation of the first educational mission abroad in 1927. Fourteen students were sent to Egypt to pursue various studies in education, judicial studies, medicine and vocational education. The Kingdom then continued to send more missions but in a slow and rather limited way. In 1936, the second mission took place with the same number of students, followed by a third in 1942, this time sending fifteen students to Egypt. The establishment of internal institutions then began with the creation of the College of Shariah in Mecca in 1949. This was followed by the College of Education in Mecca in 1952, the College of Shariah in Riyadh in 1953 and the College of Arabic language in Riyadh in 1954 (Al-Ankary, 1999; Al-Ageel, 2005).

A number of curricula were followed by these colleges in order to prepare and produce qualified teachers for the general education level. Expansion in the number of graduates from secondary schools accelerated the creation of higher education in its modern concept (Al-Ageel, 2005). The first university in the country, the King Saud University, was established by royal decree in 1957 as a single institution with nine staff members and twenty-one students (Saleh, 1986). Since that time, the number of universities and other such institutions has continuously grown and, by 2009, there were 20 government universities, six private universities, 16 private colleges, 25 health colleges, 44 colleges of technology, four industrial colleges and an Institute of Public Administration distributed throughout the country[2] (Ministry of Higher Education, 2009). In 1975, the Ministry of Higher Education was established. This was followed by the creation of the Supreme Council of Higher Education in 1994, which is the highest authority for higher education affairs (Ministry of Higher Education, 2009). A more detailed background relating to the Saudi government universities is provided below in section 2.5.

[2] Government universities are stated-owned institutions providing a diversity of courses and programmes and are supervised by the Ministry of Higher Education. Private universities are owned privately but provide similar subjects to government universities, while private colleges are institutions established by charity foundations in order to provide specialised knowledge. Health colleges are supervised by the Ministry of Health and provide medical knowledge. Both colleges of technology and industrial colleges provide commercial, technical and vocational training and education; the former are supervised by the Royal Commission of Jubail and Yanbu, while the latter are overseen by the Technical and Vocational Training Corporation. The Institute of Public Administration offers consultations on administrative issues to public sector agencies in the country and provides in-service training for their employees (Ministry of Higher Education, 2009).

## 2.4 Definition and objectives of higher education in Saudi Arabia

### 2.4.1 Definition

Higher education in Saudi Arabia is defined as post-secondary education, training and research which takes place at education institutions such as universities, colleges, and institutes in order to fulfil the different needs of the population (Ministry of Higher Education, 2003). As shown in figure 2.1, this stage begins for students at the age of 18 years. General education within the country is overseen by the Ministry of Education, which also provides education and literacy programmes for adults and the handicapped. Other government agencies and the private sector are also involved in the educational process (Ministry of Planning and Economy, 1990). As stated above, higher education institutions are also supervised by several government bodies and the private sector. The Ministry of Higher Education supervises government universities and private higher education providers, while health, technical and military colleges are managed by other agencies. All higher education institutions, except the military colleges, are supervised by the Supreme Council of Higher Education (Alkhazim, 2003).

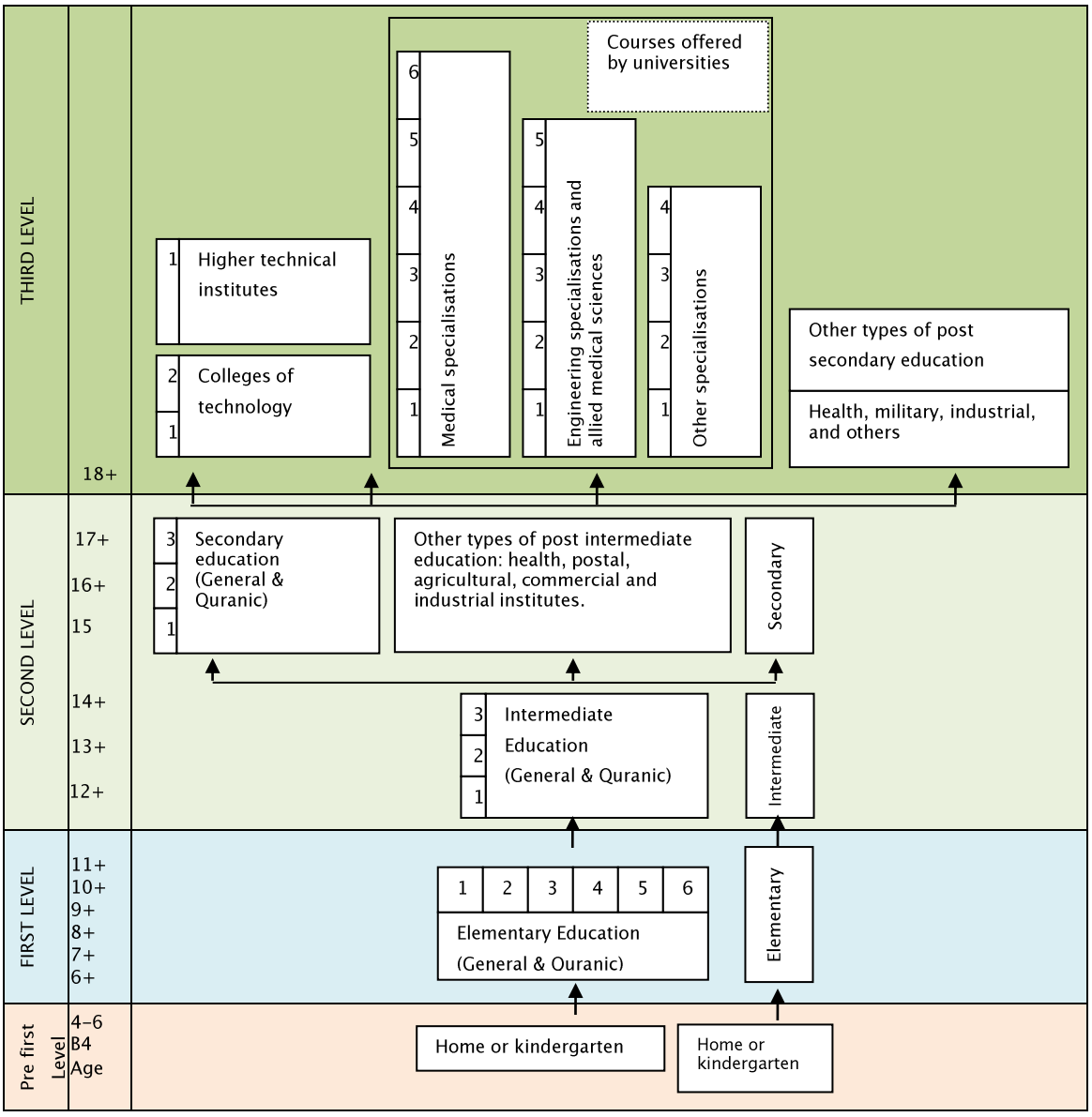
### 2.4.2 General objectives

In 1970, the Saudi Arabian government introduced a set of general objectives for its educational policy. Cultural issues and the socio-economic needs of the country were considered when these objectives were produced. According to Al-Ageel (2005), the general objectives of Saudi higher education are to: 1) develop students' loyalty to God and provide them with an Islamic education, helping them to perceive responsibility to their faith and to be useful members of the community, 2) prepare well-educated and qualified generations to fulfil duties towards their country, 3) give gifted students the opportunity to complete their higher education in various scientific fields, 4) play a positive role in developing scientific research, 5) advance and encourage academic production to allow the Saudi nation to play a key role in leading and building civilisation in the light of Islamic principles, 6) translate useful knowledge and fill the need for Arabicisation[3] by enriching the language with new terminology in order to make knowledge available to a wider audience, and 7) carry out training and

[3] Translation is a matter of giving meaning to a foreign word, whereas Arabicisation mainly focuses on the morphosyntatic modification that the foreign word undergoes so that it becomes Arabic-like (Abdelwali, 2008).

reorientation courses for working graduates to update them with new knowledge in their field of specialisation (Al-Ageel, 2005).

**Figure 2-2: Flow Chart of Education in Saudi Arabia**




*Source: Ministry of Planning and Economy, 1990*

### 2.4.3 Objectives of higher education in the national development plans

Most countries pay attention to planning, as it is considered important for overall development. In Saudi Arabia, there has been considerable interest in planning due to rapid socio-economic growth in the country over the last three decades (Al-Shehri, 2003). In 1970, the Saudi government designated the Ministry of Economy and

Planning to coordinate with other government agencies and set up the country's five-year national development plan to consider all aspects of Saudi life (Ministry of Planning and Economy, 1970). Since that time, the Ministry of Higher Education, in coordination with the Ministry of Economy and Planning, has been engaged in preparing and implementing its development plan every five years. A number of objectives were set in each plan, which shed light on the gradually changing policies in higher education in Saudi Arabia.

The first national plan (1970/71–1974/75) was created to direct the future of the higher education institutions over five years. At that time, there were only two universities and a number of colleges and there was no intention to unify them under one plan. Rather, there was a separate plan for each institution according to its needs and circumstances. The chief goals were to increase enrolment to accept all qualified applicants, to enlarge the number of qualified teaching staff and to provide the necessary funds to meet the financial obligations related to the objectives (Ministry of Planning and Economy, 1970). During the second five-year plan (1975/76–1979/80), the number of institutions increased to five universities and a number of separate colleges. This plan was similar to the first in terms of setting an individual plan for each institution. It was, however, more comprehensive in its detail and in its analysis of the existing conditions for academic institutions at that time. The overall objectives of the plan were to continue to raise the numbers of students accepted, recruit more qualified academic staff members, accelerate the progress of ongoing infrastructure projects, begin construction of new high-standard buildings, establish new colleges in different regions and, lastly, raise the funds necessary to accomplish these goals (Ministry of Planning and Economy, 1975).

The third plan (1980/81–1984/85) was quite different from the previous two in that it focused on qualitative improvement within the education system. It was suggested that the higher education system should be more responsive to the needs of the Saudi economy. Other objectives included increasing enrolment levels and establishing new colleges in order to cope with the expected rapid growth in demand (Ministry of Planning and Economy, 1980). In the fourth plan (1985/86–1989/90), there was a focus on several strategic principles, such as improving the quality of programmes through critical evaluation of their costs and consequences. Other principles included increasing productivity, reducing waste and extravagance and rationalising subsidies to achieve economies in investments and expenditures. The previous policy of allowing students to enrol at any institution was seen to be inappropriate. It was suggested instead that greater selectivity in admissions would increase outcome quality, as well as reducing the proportion of university students failing to meet degree requirements. Another suggestion was that increasing the number of secondary school graduates

accepted into alternative education (for example, vocational and technical education) would be beneficial (Ministry of Planning and Economy, 1985).

The fifth development plan (1990/91–1994/95) presented many challenges for the planners to focus upon when setting their objectives. Examples of such issues included the weak relationship between higher education outcomes and the requirements of socio-economic development, lack of co-ordination between the higher education institutions themselves and inadequate linkages between higher education institutions and the private sector. Therefore, this plan focused on finding solutions that could assist the sector. For example, due to the rapid growth of secondary school graduates, it aimed to expand females' post-secondary education and males' technical education in order to provide a greater variety of programmes. Universities were also encouraged to seek funding from private sources to establish centres of excellence for applied sciences and technology research. Another aim was to re-evaluate admissions policies and develop specific criteria acceptable to all universities (Ministry of Planning and Economy, 1990). The sixth plan (1995/96–1999/2000) emphasised a number of issues, some of which had already been identified in the previous two plans. It aimed to guarantee university places to students who could demonstrate their academic prowess or capability. It also aimed to increase the quality of higher education institutions and ensure that their activities were responsive to the developmental needs of the population and the economy. Other objectives included expanding the capacity of institutions and the diversity of their programmes, continuing the quantitative and qualitative development of the Saudi workforce and its replenishment by Saudi nationals. This plan included a range of policies aimed at achieving the objectives of the higher education system (Ministry of Planning and Economy, 1995).

In the seventh plan (2000/01–2004/05) as well as the eighth (2005/06–2009/10), there was a recurrence of the same sort of objectives as seen in the previous three plans. Providing university places to capable students, increasing the responsiveness of higher education institutions in meeting socio-economic needs, developing the Saudi workforce, enhancing coordination between institutions and establishing links between higher education institutions and the private sector were all key concerns of the previous three plans. In the eighth plan, particular attention was paid to measuring academic performance and applying accreditation systems to all programmes in higher education (Ministry of Planning and Economy, 2000, Ministry of Planning and Economy, 2005).

In the most recent, ninth, plan (2010/11–2014/15), the government has continued to favour the strategy of relating the expansion in higher education to programmes that are highly demanded by the labour market. It also aims to continue the development of

internal efficiency within higher education institutions by reducing the average number of years that a student will spend in higher education. The government also aims to send more university faculty members abroad to obtain PhD degrees, to increase the number of postgraduate students and to create new postgraduate programmes, with a focus on engineering sciences, applied and medical sciences and natural sciences. Another aim is to support the private sector in expanding private higher education, due to the limited spaces available at public institutions, and to encourage universities to establish more consulting and research centres (Ministry of Planning and Economy, 2010).

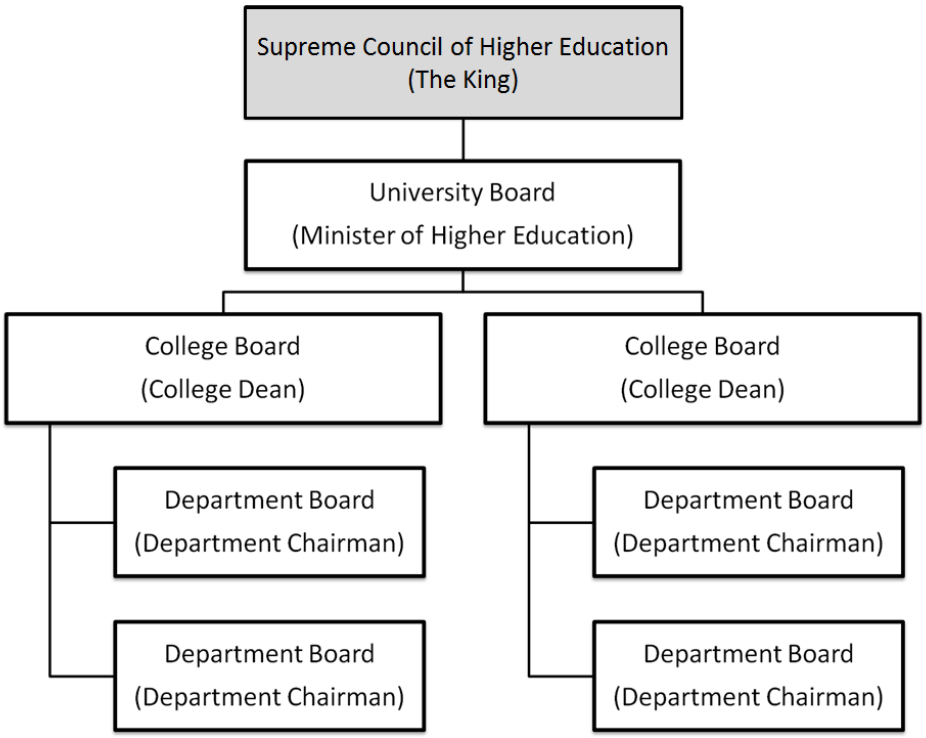
### 2.4.4 The organisational and administrative structure of higher education

Higher education in Saudi Arabia, as in many governmental sectors in the country, is structured in a centralised way. As shown in Figure 2-2, each university consists of colleges, which are divided further into academic departments. All universities are governed by the Supreme Council of Higher Education, which is considered the highest governing authority for all post-secondary education in the Kingdom (apart from military education). It is responsible for managing higher education affairs such as planning, developing policies and by-laws and approving the establishment of new institutions and programmes. It is also tasked with coordinating institutions' activities, allocating funds to all institutions and key appointment within the universities. The Supreme Council is chaired by the King, who takes the role of prime minister, while the Minister of Higher Education serves as the Deputy Chairman. The ministers responsible for education, finance, labour and social affairs, planning and the civil service are members of the Council, as are the presidents of the universities. The Council holds three meetings every year. These meetings cannot be held unless at least two thirds of the members are present. Consensus among the majority of members present is essential in order to make decisions (Al-Shehri, 2003).

At a lower level, each institution is governed by its own board, which is presided over by the Minister of Higher Education, while the president of the university acts as the deputy chairman. Other members include the vice presidents, the secretary general of the Supreme Council of Higher Education and the colleges' deans, together with three experienced external members appointed by the Minister of Higher Education for three years. Although the university board is influenced by all policies and decisions made by the Supreme Council of Higher Education, it has considerable influence on a number of university operations. Examples of tasks conducted by the university board include approving the curricula and textbooks of the academic departments, granting degrees to students and making recommendations to the Supreme Council of Higher Education for the establishment of new colleges or departments. The chairman calls one meeting

every month and may call for an extraordinary meeting whenever it is deemed necessary. As in the Supreme Council of Higher Education, board meetings cannot be held without the attendance of at least two thirds of the members (Al-Shehri, 2003).

**Figure 2-3: Organisational structure of Saudi higher education**




*Source: Al-Shehri (2003)*

Colleges are managed by the college board, which is chaired by the college dean and attended by the vice-deans and the presidents of the academic departments. The board is responsible for making recommendations to the university board on a number of issues, such as the appointment of new academic members, exam timetables and the establishment of new departments. One third of its members must attend its monthly meetings in order to approve any decisions made. The lowest level of authority in the hierarchy belongs to the department board, which is chaired by the president of the department and attended by at least one third of its academic members. All decisions made by this board go to the college board for approval (Al-Shehri, 2003).

## 2.5 Saudi government universities

The Saudi government has established 20 public universities throughout the Kingdom. These offer a diversity of courses and programmes. They can be classified as Islamic, multi-discipline or specialist universities (see table 2-1).

**Table 2-1: Saudi Arabian Universities**

| University | Type | Year of Foundation | Number of Colleges | Number of Students |
|---|---|---|---|---|
| King Saud University | Multi-discipline | 1957 | 48 | 76232 |
| Islamic University | Islamic | 1961 | 6 | 8422 |
| King Fahd University for Petroleum and Minerals | Specialist | 1963 | 9 | 9541 |
| King Abdulaziz University | Multi-discipline | 1971 | 26 | 86107 |
| Imam University | Islamic | 1974 | 16 | 37521 |
| King Faisal University | Multi-discipline | 1974 | 33 | 58388 |
| Um Al-Qura University | Multi-discipline | 1981 | 26 | 53201 |
| King Khalid University | Multi-discipline | 1999 | 38 | 54451 |
| Qaseem University | Multi-discipline | 2004 | 26 | 40797 |
| Taibah University | Multi-discipline | 2004 | 25 | 44402 |
| Taif University | Multi-discipline | 2004 | 18 | 29111 |
| King Saud bin Abdulaziz University for Health Sciences | Specialist | 2005 | 7 | 1450 |
| Al Baha University | Multi-discipline | 2005 | 11 | 14251 |
| Jaizan University | Multi-discipline | 2006 | 14 | 26647 |
| Jouf University | Multi-discipline | 2006 | 15 | 15619 |
| Hail University | Multi-discipline | 2006 | 10 | 17477 |
| Tabuk University | Multi-discipline | 2006 | 12 | 14165 |
| Najran University | Multi-discipline | 2006 | 10 | 8795 |
| Princess Nora University | Multi-discipline | 2006 | 33 | 44708 |
| Northern Borders University | Multi-discipline | 2007 | 12 | 7479 |

*Source: Ministry of Higher Education (2009)*

King Saud University is the oldest university in the country, offering a variety of undergraduate and postgraduate programmes. These include administration science, art, education, computer sciences, medicine and so forth. The Islamic University offers bachelor as well as postgraduate degrees (Masters and PhDs) in a range of Islamic studies, such as Islamic preaching and fundamental principles, Islamic law and Quranic studies. King Fahd University for Petroleum and Minerals was the first specialist university in the country. It began with a single science and engineering college entitled the College of Petroleum and Minerals, previously administered by the Ministry of Petroleum and Minerals. It offers a number of courses related to the oil industry, such as industrial management, engineering, environmental design and computer

engineering (in English). King Abdulaziz University was the fourth establishment, located in Jeddah. It was once a private institution, established by a number of local businessmen who felt it necessary to provide access to higher education within their own city. In 1971, the institution was supported by the government and was subsequently converted into a public university offering multi-discipline programmes. Imam University provides Islamic, Arabic and social science higher education degrees ranging from bachelor to PhD. King Faisal University was the sixth university, founded in the eastern region. A Bachelor degree in many specialisations is provided as well, as a number of Master degrees. Um Al-Qura University offers more diverse general and Islamic qualifications in Education, Applied Science, Engineering, Social Sciences and Medicine (Ministry of Higher Education, 2009).

After the creation of these seven universities, Saudi higher education entered a period of slow growth in which the quantitative expansion in the number of universities halted for about 20 years. During that period, only one multi-discipline university was created in the region of Asir, which is one of the most thickly populated areas. In 1999, branches of the King Saud and Imam universities merged to become the nucleus of King Khalid University, which began restructuring its departments and colleges to suit the new status of a unified university (Alessa, 2011).

The long period of slow growth in the higher education sector led to a crisis in admissions to public universities, while, at the same time, there was a remarkable increase of the general population. Moreover, the country faced its biggest economic crisis as a result of the second Gulf War in 1990, which affected the economy significantly and was followed by a series of fiscal deficits (Alessa, 2011). At the beginning of the 21st century, Saudi Arabia began to recover from the economic crisis thanks to the significant increase in oil prices following a series of terrorist attacks both inside and outside the country. The increase of oil prices resulted in a massive expansion in higher education by the establishment of a further 16 public universities (Alessa, 2011). The Ministry of Higher Education continued the strategy of grouping old branches to create new multi-discipline universities such as Qaseem University, Taibah University, Taif University, Al Baha University, Jaizan University, Jouf University, Hail University, Tabuk University, Najran University and Northern Borders University (Ministry of Higher Education, 2009).

In 2005, King Saud Bin Abdulaziz University for Health Sciences was established, which was previously known as King Abdulaziz Medical City Academy for Health Sciences. It remains the only public university in the country specialising in health sciences, such as medicine, nursing, public health, applied medical sciences, dentistry and pharmacy (Ministry of Higher Education, 2009). Princess Nora University, created in 2006, is

known to be the largest university for female students in the world. It offers courses in subjects that female students have difficulty studying at other universities where strict gender segregation is enforced[4] (Alessa, 2011).

## 2.6 Financing higher education

Higher education is mostly financed by the government through annual budgetary allocations. It is stated within the general educational policy that education is free of charge for all and at all stages, with no fees imposed by the state (Ministry of Higher Education, 2005). Higher education students are paid monthly allowances ranging from $200 to $250 (Alkhazim, 2003). They are also offered other advantages, such as free accommodation, medical care, discounted flight tickets and low price meals (Arnolds, 2006).

The government has increased higher education budgetary allocations according to the country's growing needs. Allocations for the education sector rose to SR 49,381 million ($13,166 million) in 2001, representing 27 percent of the total budget for the country. Each public university is allocated its budget independently, based on its size and needs (see table 2-2 for examples). As with all government-funded agencies, each university's budget is divided into four parts: salaries, recurring general expenditures, allocations for operations and maintenance and, finally, projects (Ministry of Higher Education, 2005).

**Table 2-2: Annual budgets for some Saudi universities in millions (SR)**

| University | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| King Saud University | 1829,533 | 2062,145 | 1765,864 | 1862,204 | 2257,361 |
| Islamic University | 208,767 | 230,690 | 211,017 | 237,345 | 276,971 |
| King Fahd University for Petroleum | 384,871 | 411,957 | 404,172 | 460,061 | 546,522 |
| King Abdulaziz University | 1231,301 | 1249,672 | 1134,426 | 1208,561 | 1432,603 |
| Imam University | 951,620 | 974,154 | 857,942 | 998,405 | 1255,317 |
| King Faisal University | 468,325 | 554,135 | 512,131 | 547,000 | 699,552 |
| Um Al-Qura University | 598,260 | 658,221 | 551,897 | 593,353 | 743,295 |
| King Khalid University | --- | --- | 300,738 | 305,239 | 355,865 |

*Source: Ministry of Higher Education, 2003*

In order to help expand education services and meet growing demand, the Saudi government sought to develop new means of funding for higher education. It allowed

[4] The concept of gender segregation comes from an interpretation of Islamic law, which is embodied in Saudi general and higher education programmes (Baki, 2004).

universities and other institutions to undertake paid scientific studies and consultancy for other Saudi agencies. Approximately 25% of this external fund goes to the budgets of higher education institutions. Universities and other institutions are also allowed to accept donations and gifts from individuals and agencies, provided that they do not conflict with the university's mission and objectives. Additionally, private sector and welfare agencies have recently been given the opportunity to invest in higher education. They are allowed to establish their own private institutions, as long as they comply with the standards and regulations set by the Supreme Council of Higher Education (Ministry of Higher Education, 2003).

## 2.7 Current challenges confronting Saudi higher education

The earlier sections in this chapter discussed the fundamental characteristics that have shaped Saudi higher education. This section expands on that discussion, describing how these characteristics create the main difficulties and challenges facing the sector. These problems are similar to those experienced in the UK, including the rising demand for higher education, the need to secure more financial resources and issues with outcome quality in relation to workforce needs (Alkhazim, 2003).

According to the eighth development plan, the total number of new entrants in Saudi higher education institutions reached 280,518 students in 2008 compared to 215,563 in 2004, representing an average annual growth of 6.81% (see table 2-3). Higher education institutions absorbed about 57% of all secondary level graduates. This rate increased to 59% percent in 2004, the final year of the Seventh Development Plan (Ministry of Planning and Economy, 2005).

Alkhazim (2003) noted that 243,000 students were expected to graduate from secondary schools in 2009, while higher education institutions maintained their existing growth rate. This indicates that only 160,000 of secondary school graduates would be able to pursue higher education (Alkhazim, 2003).

The consistency between outputs of the higher education system and the requirements of the labour market represents another significant challenge for higher education (Ministry of Planning, 8$^{th}$ plan). Alkhazim (2003), points out:

*"While about 6 million foreigners work in the country, unemployment is a major national concern in Saudi Arabia. Unemployment rate among Saudi nationals is estimated to be 13-15%, which raises the question of how confident the labour market is in the output of local higher education institutions"* (Alkhazim, 2003).

He affirms this crisis by noting further that, in Saudi higher education institutions themselves, approximately 48% of academics are non-Saudi nationals. The balance between higher education institutions outcomes and community needs is another concern. A shortage of graduates exists in some specialisations, such as engineering and health, whereas there is a surplus in social and religious studies (Alkhazim, 2003). The third challenge might be the shortage of financial resources. The main source of this difficulty is the annual allowance to students, which exceeds $800 million. The centralised budgetary system is seen to compound the situation by limiting the sector's independence and minimising the scope for development. Because of this centralised system, universities have minimal influence on their budgetary processes (Alkhazim, 2003). These challenges have led the Ministry of Higher Education to consider urgently the need for comprehensive reform of strategy in higher education institutions.

## 2.8 The future plan for university education in the Kingdom of Saudi Arabia

In October 2005, the Ministry of Higher Education launched an initiative to set up a 25-year plan for university education (later known as Aafaq, which means 'Horizons' in Arabic). The Ministry asked the King Fahd University of Petroleum and Minerals "KFUPM" to provide a detailed study in preparation for this long-term plan. In response, KFUPM formed a team of experts, which will produce the required data for preparing this plan and, further, will recommend essential criteria for producing progressive five-year development plans. The general objective of Aafaq can be summarised as follows:

*"To promote the efficiency and effectiveness of the higher education system in Saudi Arabia, through the preparation of an ambitious, futuristic, practical, and long-term plan that identifies vision, value, standards for performance measurement, and resource requirements"* (Aafaq, 2005).

To achieve this general goal, the project team has devised an idea for creating three sets of studies, which, it is claimed, will include all aspects of the higher education system. The first, entitled "Tracks studies", includes eight aspects of higher education: 1) admission and capacity, 2) the job market, 3) costing, financing and infrastructure, 4) management and organisation, 5) educational processes, 6) graduate education, 7) scientific research and 8) community services. The second set of studies is described as "specialised studies" and includes the roles of educational technologies, students,

faculty and information technology. The final set is “professional sector studies”, which concerns private higher education, female higher education, health education, engineering education and pedagogical education. The team of experts is also expected to organise a number of internal and external workshops and meetings and, further, to undertake several training sessions in order to develop the strategic framework of higher education and ensure its successful implementation (Aafaq, 2005).

## 2.9 Summary

To sum up, this chapter reviewed the changes undergone by the higher education system in Saudi Arabia. The chapter has also highlighted some environmental and organisational factors of higher education institutions in Saudi Arabia, such as the location and economy of the country and the centralised organisation for structuring and financing higher education. Details of Saudi universities, including their history, size and specialisation, have also been discussed. These factors are reflected in accounting systems in general and management accounting in particular. Due to these considerations, the value of the present research is consequently enhanced as it aims to develop a theoretical understanding of the development, use and perception of performance measurement systems in a field that is unique and continuously changing.

# CHAPTER 3: LITERATURE REVIEW

## 3.1 Introduction

This chapter aims to explore the existing literature and provide a general picture about the concept of performance measurement. This picture is then used to develop what is known as "*theoretical sensitivity*" for the researcher, which is one of the requirements of Strauss and Corbin's (1998) methodological framework. This approach has been adopted in the present study and is discussed in detail in the research methodology chapter below.

The chapter begins by discussing the use of literature within a grounded theory research. It then provides a general discussion of the historical and theoretical development of the concept of performance measurement, moving on to highlight a number of the contemporary performance measurement models. The use of performance measures in the public sector is discussed in the fourth section. The fifth section provides details of measuring performance in the higher education context.

## 3.2 Literature review and grounded theory

In grounded theory studies, literature plays a different role in comparison with other traditional research methodologies. This difference can be attributed to the concept of theoretical sensitivity, which is an important aspect of grounded theory. Theoretical sensitivity, as described by Strauss and Corbin (1990), refers to:

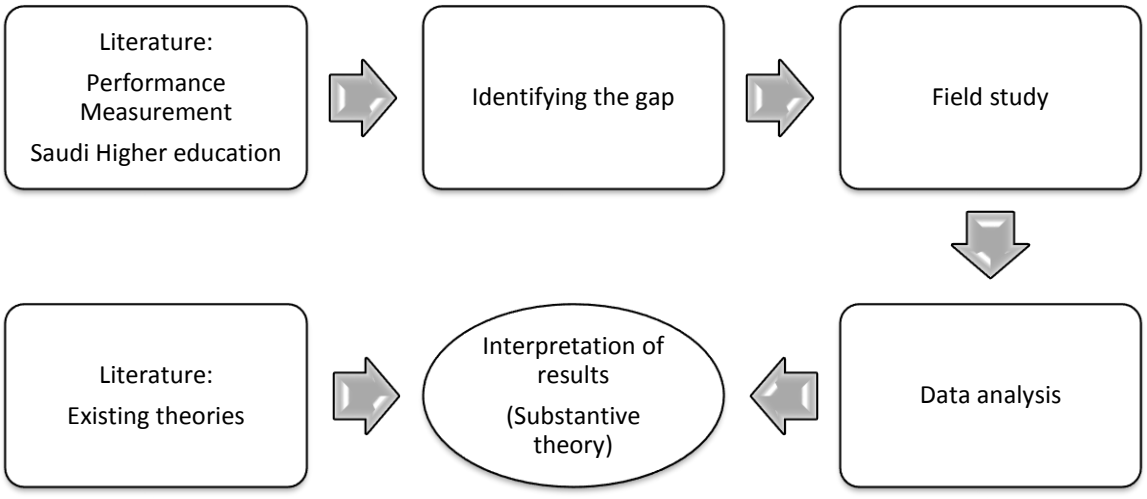
*"an awareness of the subtleties of meaning of data. One can come to the research situation with varying degrees of sensitivity depending upon previous reading and experience with or relevant to an area. It can also be developed further during the research process. It refers to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't. All this is done in conceptual rather than concrete terms. It is theoretical sensitivity that allows one to develop a theory that is grounded, conceptually dense, and well integrated – and to do this more quickly than if this sensitivity were lacking"* (Strauss and Corbin, 1990, pp.41-42).

Therefore, literature within a grounded theory study is used as a main source to increase one's sensitivity to the phenomenon under investigation. Researchers, however, should maintain a cautious stance towards prior knowledge in order to avoid

acceptance of concepts that are not truly relevant to the data (Chenitz, 1986). Thus, the literature review in grounded theory studies is a continuous process to help the researcher discover concepts and categories within the data. According to Chentiz (1986, p45) "Literature is conceived of as data and not viewed as inherently true". Therefore, the researcher should remain aware of the different purpose of literature in the development of grounded theory.

As shown in figure 3-1, a literature review of performance measurement in Saudi higher education was conducted to assist the researcher in identifying a gap in the existing knowledge that could be filled by further investigation. After finding a gap, the data was collected and analysed using Strauss and Corbin's (1998) grounded theory procedures. A substantive theory of performance measurement systems in the selected Saudi universities was achieved as the result of this analysis. At this point, a further literature review was needed in order to compare the findings with extant theories and to see what contribution this substantive grounded theory could make within the field. Therefore, literature was not used as a foundation on which to conduct this study; rather, its main role was to help discover a gap in the existing knowledge and then to compare the emergent substantive theory with other literature in order to identify theoretical contributions.

**Figure 3-1 Literature review process**



## 3.3 Performance measurement systems

### 3.3.1 Definitions

As a concept, performance measurement is frequently debated but rarely defined (Neely *et al.,* 1995); it may, therefore, be helpful to shed light on a number of definitions found within the literature. The term "performance measurement" refers to the means by which organisational control is monitored and maintained (Nanni *et al.,* 1992). It also describes the process of quantifying the effectiveness and efficiency of an action, using various performance measures (Neely *et al.,* 1995). The US General Accounting Office gives the following definition:

*"Performance measurement is the ongoing monitoring and reporting of programme accomplishments, particularly progress towards pre-established goals."* (US General Accounting Office, 1998, p.3)

Performance measures can be defined as metrics to determine the efficiency and effectiveness of the work (Neely *et al.,* 1995). They may deal with *"the type or level of program activities conducted (process), the direct products and services delivered by a program (outputs), and/or the results of those products and services (outcomes)"* (US General Accounting Office, 1998, p.3).

According to Neely *et al.* (1995), performance measurement system is, therefore, the set of metrics that determine the efficiency and effectiveness of the work.
This term relates closely to the term "performance management system" but they cannot be used interchangeably. Nudurupati *et al.* (2007) distinguish performance management system as a philosophy supported by performance measurement. They define it as the organisational vision, teamwork, training, incentives and other aspects surrounding the performance measurement activity.

Bititci *et al.* (1997) address the relationship between the two concepts by describing performance measurement system as a basis on which the management system may be built:

*"correctly structured and designed performance measurement system would provide the basis for a rigorous and effective performance management system, which could be used as a management tool by strategic, tactical and operational levels of management"* (Bititci et al., 1997, p.522).

### 3.3.2 Historical background

Ghalayini and Noble (1996) stated that there are two major stages involved in the literature of performance measurement. The first stage began in the late 13th century and lasted until the 1960s, while the second stage started in the 1970s. The first stage was concentrated mainly on deriving statistics, such as productivity, profit and the return on investment, whereas the second focused on non-monetary measures that had been introduced. These stages are explained in detail later on.

#### Financial Measures

Performance measures have always been one of the most widely used methods to analyse the level of a company's success. The new accounting framework was introduced in the Middle Ages and, from then onwards, the performance of the organisations has been measured according to these criteria. The method of a double entry system was introduced in order that transactions between traders could be verified and, accordingly, errors could be avoided. As a result, action was taken to measure the profit on investments and owners were able to judge clearly how well the company was doing and ascertain its financial position. From that time, such performance measures are used frequently to measure the success of a company (Kennerly and Neely, 2003).

Niven (2002) states that, during the early years of the twentieth century, innovation in financial measures was important for market leaders such as General Motors. Of the various financial measures introduced and used, those seen most commonly were Return on Capital Employed, Economic Value Added and Market Value Added (Mohamed, 2003; Brewer *et al.,* 2004; Mukhopadhyay, 2005).

Williams (2002, 2003) showed that the first extended implementation of prototypical performance measurement practices was undertaken at the New York Bureau of Municipal Research from 1906. There were many preceding activities but those used most commonly were social surveys of settlement houses prior to developments in municipal statistics and recent advances of cost accounting (Williams, 2004).

According to Chandler (1977), the foundation of the modern management practices goes back to 1910. He discusses the three Du Pont cousins who merged their individual enterprises with other single-unit family organisations in 1903. They brought about a revolution of sorts in the American explosive industry and initiated an organisational structure that used the most efficient practices of its time. By the year

1910, the Du Pont family had advanced their techniques to utilise all the methods required to run a modern enterprise (Chandler, 1977). Neely (1999) stated that these conventional management methods have been in use for quite some time now and that performance measurement is one of these most significant developments to emerge.

The conventional techniques of performance measurement, according to Johnson and Kaplan (1987), have developed largely due to the emergence of huge industrial organisations in the 1920s and concentrate on a number of key financial measures, such as earning per share and return on investment.

Williams (2004) discovered that the research activities of the New York Bureau of Municipal Research comprised part of the prototypical performance measurement for two key reasons. Firstly, their focus was on the efficiency and effectiveness shown by the government. They sought to link their resources to fulfil government objectives, which is now known as performance budgeting, and to measure the results of the government's efforts, then to benchmark what was anticipated as an outcome and, finally, to try to improve the performance of the organisation and make best use of it. Secondly, the New York Bureau of Municipal Research practices are the predecessors of the performance measurement techniques used today.

The early methods of performance measurements were incorporated into these new practices in three main ways. Firstly, the New York Bureau of Municipal Research needed to reform the budgets and accounting methods so that costs could be allocated according to the government's activities. Secondly, the New York Bureau of Municipal Research was required to come up with real-time records of the performance of the work so that cost could be allocated according to output and activity. Finally, the New York Bureau of Municipal Research's method centred on the measurement of social conditions that often involved focus on needs appraisals and on outcome results (Williams, 2003).

According to Davig *et al.* (2004), performance measurement initially involved two objectives. Firstly, it provided managers with the information that would determine the nature and status of the work completed and played a vital role in improving work productivity. Secondly, it also provided an ample amount of support in the making of budgetary decisions by exposing information in relation to needs and effectiveness of the programme (Williams, 2003).

According to Williams (2004), performance measurement practices underwent vital changes following the work conducted by New York Bureau of Municipal Research until

the end of the 1920s. He further stated that in certain contexts, such as health, fire protection and policing, methods became more sophisticated.

As per Davis and Albright (2004), more sophisticated cost accounting methods were introduced during a particular phase of performance measurement. Buck and Watson discarded functional accounting as cost accounting in 1926 and, alternatively, they used cost centres. They defined three types of units: production units, work units and service-based units (Williams, 2004).

As indicated by Williams (2004), by the 1930s performance measurement had been built on the basis of practices used for about 25 years. He considers that performance measurement advanced from a wide-ranging study of government to a smaller and more sophisticated investigation of government service. It was mainly concerned with government management and had a less direct connection to the public. He further elaborates that history tells us that performance measurement does not imply a certain empirical practice. Rather, it refers to the application of suitable methods to the issue of evaluating government at work (i.e. delivering government service).

Management techniques of cost accounting became common in the United States (Behn, 2003). In the 1920s, budgetary systems were widely used. Alfred Sloan at General Motors made use of responsibility accounting in the 1930s, while return on capital employed was used at Du Pont prior to World War II (Eagle *et al.* 2004). Meyer and Gupta (1994) believed that performance measurement and management decisions tended to be based on cost accounting information. In 1951, General Electric established a measurement project, the purpose of which was to build up performance measures useful for a decentralised business (Meyer and Gupta, 1994).

During the early industrial age, business performance measurement was connected more to the financial aspects of organisations, while non-financial aspects were completely ignored (Ghalayini and Noble, 1996). Performance measurements were usually based on management accounting. Hence, most measures concentrated on financial data, such as return on investment, sales per employee, price variation, return on sales, profit per unit production and productivity (Ghalayinin and Noble, 1996; Mohamed, 2003; Debnath *et al.,* 2004).

Unlike modern businesses, information provided by cost accounting was more useful for low technology and high labour content and was unable to map process performance (Williams, 2004). Management theory in the 1970s and 1980s held that, in order to enhance shareholder value, organisations should optimise at business unit level. Hence, an important emphasis was placed upon measuring financial performance

and tangible assets. These one-dimensional financial performance measures focused only on the tangible aspects of the business (Ghalayini, and Noble, 1996).

**Limitation of Financial Measurement**

During the last two decades, it has been broadly accepted that financial measures for long-term performance are not perfect (Brignall *et al.,* 1991; Kaplan and Norton, 1992; Ghalayini and Noble, 1996; Neely, 1999; Gumbus and Wilson, 2004; Angel and Rampersad, 2005; Karathanos and Karathanos, 2005; Wells and Weiner, 2005). Skinner (1971), cited in Neely *et al.* (2000), says that managers who apply simplistic measures based on efficiency and cost can create difficulties for their company due to their ignorance of more relevant performance measurement criteria. At the time of the industrial revolution, the measurement of performance was financial in nature, it being considered that a company's success rested in the utilisation of physical capital. However, with the occurrence of the information and knowledge economy, this view have changed and intangible assets are now considered to be a key success factor (Kaplan and Norton, 1996a; Mohammed, 2003; Gumbus and Wilson, 2004).

As for the traditional performance measurement system, many criticisms were raised of its neglect of different dimensions affecting performance, due to the financial perspective being its only focus (Bringall and Ballantine, 1996). In addition, Niven (2002) pointed out another limitation of financial measures: they promote short-term thinking. He also pointed out that financial measures are more concerned with functional matters and are irrelevant to most organisational levels.

A few researchers described financial measures as "lagging indicators". This means that they are not the main cause of performance and show only how well the organisations have performed (Eccles and Pyburn, 1992). It is thought that, in the 1920s, there was no more development in traditional management system, while most of the prevailing accounting procedures existed at that time (Johnson and Kaplan, 1987; Van der Meer and Vosselman, 2004).

Neely (1999) presents a list showing the limitations of traditional measures. According to him, financial measures are lacking in strategic vision and supplying information related to quality, responsiveness and flexibility. They focus more on local optimisation and less on continuous improvement. They fail to provide information concerning customers' needs and the performance of competitors.

Olve *et al.* (1999) also added to the number of criticisms. They argued that traditional measures give information which is misleading for making decisions, control of

investment and cost allocation. They fail to fulfil the strategic requirements of organisations, provide irrelevant information about employees and are less focused on the business environment.

New performance measures are needed due to the aforementioned limitations of financial performance measures. In order to generate forward-looking information, most researchers take the view that more measures should be included in performance reporting. Non-financial measures would aid in developing a comprehensive view regarding key business processes (Carmona and Grönlund, 2003; Zelman *et al.,* 2003; Davis and Albright, 2004).

**Need for non-financial measurement**

It is apparent in the new economy that non-financial measures carry considerable importance. Investors must evaluate value creation, while creating shareholder value is of the utmost significance for organisations. When suitable measures are applied, needs can be fulfilled by the organisation, which is definitely in accordance with strategic vision (Carmona and Grönlund, 2003; Zelman *et al.,* 2003; Davis and Albright, 2004). Olve *et al.* (1999) stated that it is the mark of a competitive organisation when diverse aspects of its business are included to generate a comprehensive report.

Reasons for the need for non-financial measures have been presented by Neely (1999). These include the power of information technology, altering external demands, changing organisational roles, international and national awards, specific improvement initiatives, rising competition and changes in the nature of a business.

Mukhopadhyay (2005) recommended that an organisation should include its intellectual and intangible assets in its performance measure model. Such assets may include loyalty and the satisfaction level of its customers, employees' skill and motivation as well as the quality of services and products. As intangible assets are more important than tangible or physical assets, they must be evaluated too (Kaplan and Norton, 1996b; 2000a; 2004b).

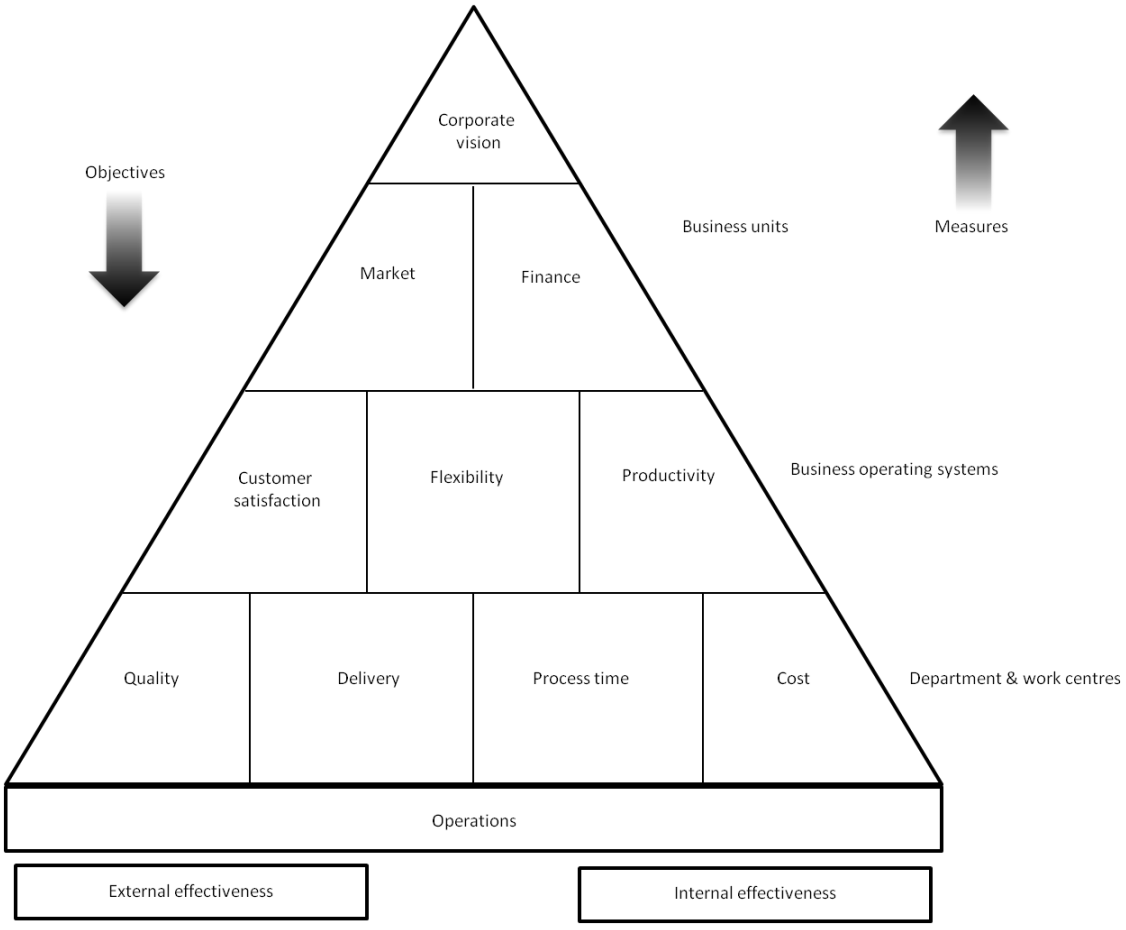
### 3.3.3 Contemporary performance measurement models

Several new performance measurement systems have been introduced during the last twenty years due to the shortcomings of traditional performance measures. Examples of these systems are discussed below.

**Performance Pyramid**

SMART stands for Strategic Measurement Analysis and Reporting Technique, which was developed by Lynch and Cross (1991) as a measurement device to link corporate strategy with operations. Organisational objectives are cascaded to operational levels in a top-down approach, while performance is measured in the opposite direction from the bottom upwards. This model is divided into four levels (see figure 3-2) topped with the corporate vision. At this level, a corporate portfolio role is assigned to each business unit with the required resources. At the next level down, business units define their objectives in terms of market and financial perspectives. At the third level, financial and market objectives are converted into key measures of customer satisfaction, flexibility and productivity. These measures at the fourth level are translated into specific operational measures (quality, delivery, process time and cost), which are related to work centres and departments (Galayini and Noble, 1996).

**Figure 3-2: Performance Pyramid**



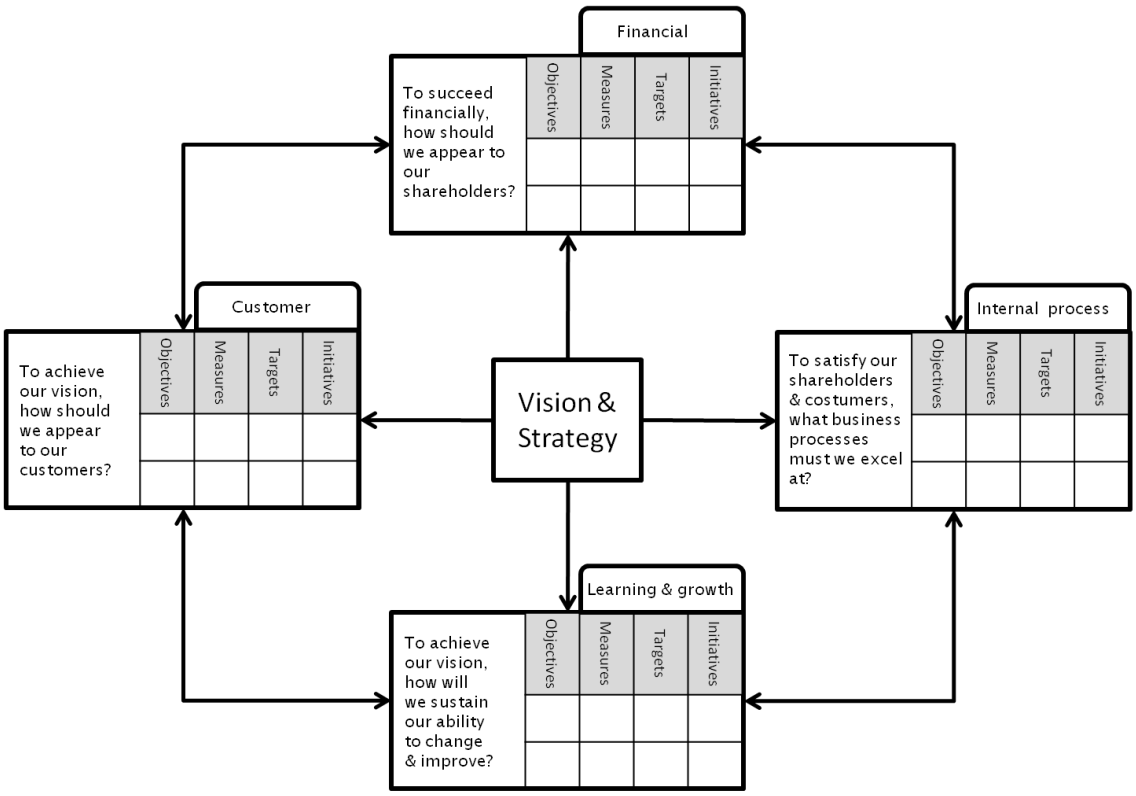

*Source: Lynch and Cross (1991)*

This framework, as suggested by Neely *et al*. (2000), can tie together the hierarchical view of business performance measurement with the business process view. It can also differentiate explicitly between external measures, such as customer satisfaction, quality and delivery, and internal measures that are primarily of interest within the business, such as productivity, process time and cost.

## Balanced Scorecard

Founded by Kaplan and Norton in 1992, the BSC is a tool that translates corporate strategy into a set of tangible performance objectives and indicators, comprising both financial results and drivers of future performance. These objectives and measures, when balanced, provide managers with a comprehensive picture of their organisations according to the four perspectives: financial, customer, internal business process and learning and growth (figure 3-3).

**Figure 3-3: Balanced Scorecard**




*Source: Kaplan and Norton (1996)*

The *financial perspective* is how the organisation wishes to be seen by its shareholders. It measures the economic results, such as profit margins and return on investment. The *customer perspective* describes how the company should appear to its customers. This is measured by key aspects, such as customer satisfaction and

customer retention. The *internal business process perspective* concerns processes, such as innovation, operations and post sales service, at which the company must excel in order to satisfy customers and shareholders. The *learning and growth perspective* focuses on changes and improvements to achieve the financial, customer, and internal business processes objectives in principal categories, such as employee capabilities, information system capabilities and motivation.

Kaplan and Norton (1996) extended the concept by emphasising the importance of aligning scorecard information with business strategy, the BSC being not just a strategic measurement system but also a strategic management system. The BSC can be used to: 1) clarify and translate vision and strategy, 2) communicate and link strategic objectives and measures, 3) plan businesses and set targets, and 4) enhance strategic feedback and learning.

A key assumption made by Kaplan and Norton is that performance outcomes and drivers are linked in a cause and effect relationship, which should be made explicit (1996b). Causality in relationships is an important aspect when selecting measures. It translates revenue, as a financial objective, into operational factors. Indicators can be recognised and alignment of strategic goals facilitated (Mooraj *et al.,* 1999).

**The Performance Measurement Questionnaire (PMQ)**

PMQ is another performance measurement technique, developed by Dixon *et al.* (1990). It was aimed to assist organisations in identifying their improvements needs, examining the appropriateness of existing performance measurers and establishing an agenda for performance measure improvements (Pun and White, 2005). The questionnaire starts by providing general data used to categorise respondents. The next part assesses the competitive priorities of the organisation and performance measurement system. This consists of items such as quality and labour efficiency, as shown in table 3-2. This is followed by a similar part focusing on performance measures. The fourth part aims to list the best performance measures from the perspective of the respondents (Ghalyini and Noble, 1996).

**Table 3-1: Section of Part Two of PMQ**

| Long-run importance of improvement | Improvement areas | Effect of current performance measures on improvement |
|---|---|---|
| None >>>> Great | | Inhibit >>>> Support |
| 1 2 3 4 5 6 7 | Quality | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | Labour efficiency | 1 2 3 4 5 6 7 |
| 1 2 3 4 5 6 7 | Machine efficiency | 1 2 3 4 5 6 7 |

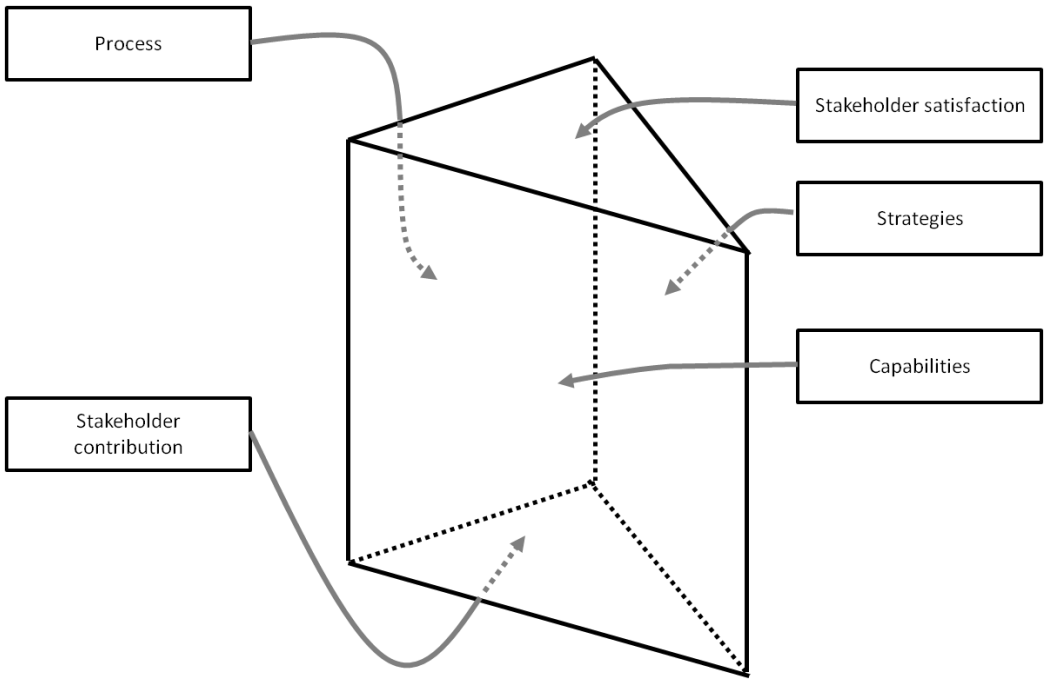
*Source: Ghalyini and Noble (1996)*

Once the questionnaires have been collected, they are analysed in four ways (alignment analysis, congruence analysis, consensus analysis and confusion analysis). These types of analyses are conducted to examine the extent to which actions complement strategy, to assess the extent to which the organisation's measurement system supports its actions and strategy, to show the effect of communication and to determine the extent of consensus regarding each improvement area and performance measure (Ghalyini and Noble, 1996).

**The Performance Prism**

This recent conceptual framework was developed by Neely *et al.* (2001). It takes into consideration the requirements of all stakeholders as a central and important theme to performance measurement and management. The prism consists of five distinct but linked perspectives (see figure 3-4). The top facet is *Stakeholder satisfaction,* which aims to identify the key stakeholders to the organisation, together with their needs. As Neely *et al.* (2001) claim, this perspective takes into account a broader view of stakeholders than the balanced scorecard, which aims only to satisfy customers and shareholders. The second facet of the prism is *Strategies*, which seeks to assess whether the existing strategies pursued satisfy the requirements of key stakeholders. These strategies, according to Neely *et al.* (2001), cannot be formulated before key stakeholders have been clearly recognised. *Processes* is the third facet, which identifies the required processes that must be put in place in order to deliver strategies. *Capabilities* (such as people, technology, practices and infrastructure) have to be clearly defined to operate the pre-identified processes. The bottom facet of the prism is *Stakeholder contribution*. It answers the question as to what an organisation needs from its stakeholders in order to maintain and develop its capabilities. Upon introducing this facet, it must be considered that organisations should enter into a relationship with stakeholders rather than simply delivering value to them (Lardenoije *et al.,* 2005).

**Figure 3-4: The Five Facets of the Performance Prism**

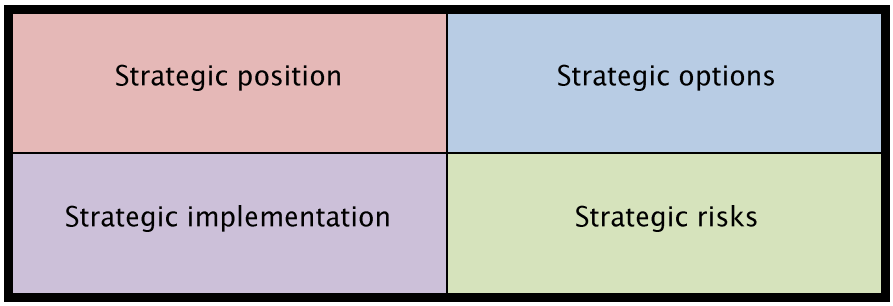



*Source: Neely et al. (2001)*

### The CIMA Strategic Scorecard

The Chartered Institute of Management Accountants (CIMA) has developed a strategic scorecard that is currently under development. This framework was introduced to address the shortcomings of the balanced scorecard. Its developers consider that the balanced scorecard fails to address a number of external strategic issues facing organisations – such as new regulations, market collapse or the activities of competitors – because it lacks the strategic options necessary to overcome these problems. Therefore, CIMA has created the strategic scorecard in order to complement the balanced scorecard. The strategic scorecard aims to fulfil the following objectives: 1) helping independent directors to supervise their organisation's strategic processes by providing them with a framework, thereby enabling them to assess strategies presented to them constructively, 2) dealing with strategic options and transformational change, 3) offering a factual view of the organisation's position and progress, 4) tracking inputs and outputs of the strategic process, and 5) emphasising the important strategic points necessary for decision making (Gillian, 2004).

**Figure 3-5: CIMA strategic scorecard**




*Source: Gillian, (2004)*

As shown in figure 3.5 the framework consists of four dimensions, for which the management must provide a sufficient description. The first element (strategic position) shows the strategic areas requiring continuous review, such as micro and macro environment, change threats, business position, capabilities and stakeholders. The scorecard aims to make the directors aware of what is being performed, and when, within the strategic process. The second element (strategic options) identifies the options available to the organisation in terms of change of scope and change of direction. These options should include those with great potential for increasing or decreasing shareholder value. The directors should be aware of the analysis performed, the resource constraints and of alternative options. The third element (strategic implementation) shows the updates on progress for strategic options at the stage of implementation. The final element (strategic risks) reveals the types of assurance on risks that should be covered, such as clarification of the company's risk tendency, a review of strategic risks, and analysis of probability and impact of significant risks. Other types of assurance include strategic risks embedded in the organisational plan, the appropriate process for reviewing risks, action plans for significant risks measured against objectives and verification that risk management is entrenched in major projects such as acquisitions (Gillian, 2004).

### 3.3.4 Performance management in the public sector and related theories

Public organisational management has been structured by a strict hierarchy and underpinned by deeply embedded bureaucratic procedures (Ezzamel and Willmott, 1993). However, a number of theories have been proposed in the past twenty years with the aim of improving public sector management (Strehl *et al*., 2006). Among the most prominent of these theories are New Public Management (NPM) (Hood, 1995), New Institutional Economics (Williamson, 2000; Daniel, 2001), and Good Governance (Turner, 2005).

The NPM theory argues that public sector organisations can benefit from the implementation of the strategies and methods of management applied in the business sector organisations. These strategies advocated by the NPM include: shifting to decentralised decision-making processes and accountability, provision of greater autonomy and flexibility to budgets, stimulation of competition between organisations, provision of explicit standards and measures of performance, giving priority to outcomes instead of processes and conformance to rules, as well as the introduction of private-sector mechanisms, management instruments and best practice concepts (Hood, 1991).

Good Governance is another theory which has taken shape in recent times (Strehl et al., 2006). As Turner (2005) explained, Good Governance is defined by a series of particular management concepts, including transparency, accountability responsibility, responsiveness and participation. In this fast paced and rapidly changing era, Good Governance affords a new and efficient approach to the management of the public sector enterprises. Furthermore, this theory has a string of implications, including reduced number of regulations, distinguishing between the roles of public sector leadership and management, decentralisation, activity outsourcing, privatisation, the creation of contract-based relationships between the state and decentralised organisations in keeping with the principal-agent concept and performance management, and implementation of new managerial and financial strategies.

A new type of contract-based relationship between the state and associated institutions has also been shaped by the theory of New Institutional Economics (Williamson, 2000). The theory is designed to define institutions and their functions, and explain their emergence, transformations they undergo and any related reform approaches (Klein, 2000). It was developed by Oliver Williamson in 1975 and it advocates the notion of transaction cost economics to primarily examine the markets and hierarchies (Ahmed and Scapens, 2000). These theories, which have an impact on performance management promoted researchers to explore this field from many different perspectives.

This study focuses on the application of performance measurement systems in a public sector setting, therefore, topics related to the use of different performance measurement mechanisms and their implications on performance management and accounting are discussed below.

### 3.3.5 Performance measurement systems in the public sector

The potential and relevance of introducing private sector performance measurement systems in public establishments have been weighed by a number of studies, which are discussed in the following part.

The Balanced Scorecard (BSC) is one of these tools that is believed to be potentially useful in public organisations. Kaplan and Norton (2001b) stated that the perspectives of BSC require adjustment or expansion to enhance its relevance in any context. Arguing in favour of the application of BSC in non-profit organisations, Kaplan (2001) highlighted the results obtained by a number of case studies that use BSC as a performance measurement method. He further added that, non-profit organisations benefit greatly from BSC, which enables them to attain a position where their assessment depends not on their level of profitability or cost reductions, but on the extent to which they fulfil the needs of society. Moreover, BSC helps non-profit organisations to outline their strategy more clearly and convert it into quantifiable daily actions and tasks. Kaplan claimed that, through BSC, non-profit organisations are able to meet organisational goals and increase their performance significantly by achieving effective coordination between their organisational resources, including initiatives, departments, leadership levels, technology tools, financial reserves and individuals. An observation that Kaplan (2001) made in two case studies he addressed was that the performance management systems were disrupted by changes in senior management and by the insufficient dedication showed by the new managers towards the BSC. Such a situation was comparable to circumstances in private sector organisations.

Aidemark (2001) explored how useful the BSC was in Swedish healthcare institutions and confirmed its appropriateness for such cases, changing the “top-down” structure of management to a type of “clan control” style. This could have several positive implications, such as minimisation of objective ambiguity, improvement of dialogue between management staff, medical staff and politicians, as well as initiation of goal and strategy assessment. Additional studies demonstrated that, in the context of local governments in the UK, the application of the Best Value strategy is facilitated by the use of BSC (McAdam and Walker, 2003). On the other hand, Broad et al. (2007) failed to find incontrovertible proof that strategic decision-making and resource distribution in public sector settings were aided by the employment of performance measures. Furthermore, no correlation was identified between the financial dimension and other dimensions with regard to BSC in this context.

The ramifications of BSC application have been investigated by Kasperskaya (2008) on the basis of two case studies focusing on two city councils in Spain and drawing on the

institutional theory notions of Old Institutional Economics and New Institutional Sociology. In each case, BSC implementation was supported by different facets of institutional isomorphism. Firstly, coercive isomorphism where BSC was enforced upon the council by regulatory law. Secondly, mimetic isomorphism where building the BSC was based on templates of reputable councils. Finally, normative isomorphism where both cases formulated conclusions on BSC based on the knowledge attained from educational sessions. Nevertheless, it was noted that the BSC usage in one case was deemed to be symbolic, and in the other case it was used in a more rational and constructive manner. What is more, in the first case, the application of BSC required the formulation of a new and complex strategy. This new strategy was considered as symbolic because it caused divergence with the existing one. By contrast, in the second case, the existing strategy and BSC measures were interconnected, thus supporting each other and facilitating the accomplishment of goals. Given these considerations, it can be argued that the competence and legitimacy of BSC application dictate to a significant degree how useful BSC practice is in public institutions.

Analysis of the outputs and outcomes of public sector institutions as indicators of their performance has been proposed by a considerable number of researchers. Several governments around the world have attempted to consult organisational performance to determine budget allocation to public organisations (Carlin, 2004). The reverse of the traditionally used performance measures, which is concerned with inputs, processes, and outputs, is the outcome-based performance measurement (Buckmaster, 1999).

In this context, the difference between output and outcome must be clearly delineated. As such, output is less broad than outcome, and the measurement of the latter should be undertaken with the purpose of measuring the impact of activities on the attitudes, behaviour, position, wellbeing of the individuals or community in question. In contrast to the largely subjective outcome, output can be interpreted as a direct, impartial result of activities with regard to service unities (Buckmaster, 1999).

In an empirical research conducted by Heinrich (2002), administrative data were appraised in terms of their precision in determining the extent to which federal work-training programme outcomes were controlled by public management and system-design factors. Despite supplying managers with useful information for rectifying the directions and enhancing organisational outcomes, the administrative data were found to be unlikely to accurately reflect the implications and results of such programmes. In theory, output-based performance management is not as effective as the outcome-based one (de Bruijn, 2002); however, ensuring the reliability of an outcome-based performance management system is not as straightforward as it may seem, the design process often being problematic (Heinrich, 2002), complex and lengthy (Boland and

Fowler, 2000). Hence, in the case of governmental institutions, allocating budget and accountability are usually dealt with based on consistent and endorsed performance measures (Boland and Fowler, 2000).

In governmental institutions, performance management can generate both favourable and unfavourable results. As highlighted by de Bruijn (2002), the main favourable results of performance management are increased transparency, greater accountability and process and outputs improvement. However, with respect to local governments in the United Kingdom, Goddard (2005) expressed the view that the new methods of New Public Management, especially performance indicators or Value for Money (VFM), do not have as great an effect on accountability as budgeting strategies.

An appraisal of the influence of performance management system on organisational performance, in terms of both quantity and quality, has been the focus of the research undertaken by Verbeeten (2008). To this end, Verbeeten established “efficiency” and “amount of service of provided” as indicators of quantitative performance, and “precision”, “quality”, “innovation” and “staff mood” as indicators of qualitative performance. To gather the necessary data, a questionnaire survey was distributed among 93 Dutch public organisations. Moreover, he attempted to evaluate organisational performance in relation to each aspect of performance management, defined as a process of objective formulation, strategy selection, accurate decision-making, performance measuring, and rewarding. Whereas clarity of objectives was found to be positively correlated with performance quality and quantity, rewarding practices were not linked to work quality, but purely with the volume of work done.

In terms of unfavourable result of performance measurement systems, Smith (1993) warned that the accuracy of results may be impaired if indicators of the performance of public companies are overemphasised. Along the same line, de Bruijn (2002) identified several unintended consequences of the implementation of performance measurement in the public sector, including game-playing, internalised bureaucratic system, inhibition of innovation and initiative, dissensions with professionals, and a reduced responsibility on organisational level. Van Thiel and Leeuw (2002) discovered a range of other implications of performance measurement in public organisations in a review of the existing literature, such as increased number of auditing activities and regulations, greater auditing costs, lack of quality, prevention of innovation, sub-optimisation, measure fixation, narrow mindedness, lack of flexibility, as well as a predilection for emblematic actions. Furthermore, they outlined the performance paradox, which they defined as the discrepancy between the actual performance and assessed and reported performance. This paradox arises as a result of changes in circumstances and in individual behaviour, which make the performance indicators less precise. For instance, performance indicators can be diminished by both positive and

negative learning, selection and manipulation. The outcome of this is the performance paradox or, in other words, the level of organisational performance is reported to be higher or lower than it actually is.

Among the explanations proposed for the occurrence of the inadvertent performance paradox are insufficient or simplistic performance measures, unclear objectives, difficulty of measuring some objectives, as well as overemphasis of performance indicators as the only tool for assessment. Since New Public Management and performance management in the public sector most often result in commercialisation and unprofessional activities, Adcroft and Willis (2005) argued that this type of management may not be the most suitable for the accomplishment of objectives in public organisations and the current performance management systems require further amendment.

Relying primarily on accounting data, quantitative performance measures are the preferred criteria for the majority of both private and public organisation (Modell, 2004). In the case of public institutions, budget control is the main application of accounting systems (Ramadhan, 2009). In comparison to the suggested methods of the New Public Management, accountability in the public sector is more significantly influenced by the budgetary system, which has come to be known as an out-dated instrument of performance management (Goddard, 2005). Furthermore, the emergence of new kinds of competition and innovative management practices has increased reliance on financial and accounting data not only for performance measurement, but also for pricing procedures (Ballantine *et al.*, 1998).

Focusing on 26 member states of the Organisation of Economic Cooperation and Development (OECD), Martí and Vía (2007) attempted an analysis of the relationship between the accrual-based accounting system, financial decentralisation, and Governance measures. These three dimensions were demonstrated to be positively correlated based on focused secondary data. On the other hand, financial decentralisation and accrual-based accounting were not observed to be significantly correlated. The findings they obtained prompted the authors to draw the conclusion that, in accordance with Governance, the improvement of accountability and transparency can be achieved by implementing accrual accounting systems instead of other systems, like cash-based accounting.

In a grounded theory study by Broad *et al.* (2007) on higher education institutions and city councils, they aimed to determine the correlation between strategy, accounting and performance measurement system. Their results revealed that the managerial approach adopted by the city councils was characterised by a high degree of centralisation, structure and formalisation. By contrast, universities were found to

apply a largely decentralised, informal and open managerial approach. Furthermore, whereas in local government organisations, performance measurement was defined by a high level of bureaucracy and inflexibility, in universities, it was characterised by greater flexibility and informality. This suggests that members in higher education institutions and the lower managerial staff of local governments did not attribute as much importance to performance management as city council managers did. In addition, the budget system implemented in the various investigated cases, whether short-term or long-term, was discovered to be the unifying link between accounting, performance management and strategy. However, a different reporting system was used in each case and the similarities between them were insufficient to formulate a definitive conclusion.

Several observations of relevance to the present study can be derived from the above overview of performance management in public sectors. Due consideration must be afforded to theories, like NPM and institutional theory, and their impact on the new reforms sweeping through universities in Saudi Arabia. Hence, the expectations regarding the management accounting practices of private companies that are applied in public organisations, including Saudi higher education institutions, may not be far off the mark. Studying various methods of performance assessment in the public sector would assist this study in relating such methods with performance measurement techniques within the public higher education context in Saudi Arabia. This can also afford a better comprehension of the connection between performance measurement and accounting in the context of this study. The following part of the study addresses additional aspects of performance management of particular relevance to higher education institutions.

### 3.3.6 Performance measurement in higher education

The transformations in public sector management that have been discussed in the previous part are likely to be relevant to higher education institutions as an important component of the public sector. This explains the considerable number of studies that have addressed various dimensions of performance management in universities.

The main challenges confronting universities, from the perspective of Staats (1976), include economic turmoil, reduced public trust in the relevance of higher education, more demand for technical subjects and less for the arts, as well as the fast-paced development and branching out of knowledge and subjects. These issues have been augmented by new ones, such as increased requirement for more accountability, market-oriented education reforms and improved quality and efficiency (Johnstone *et al.*, 1998; Maassen, 2000).

To enhance their performance, a range of strategies have been employed by the government, which is the primary stakeholder of higher education institutions. In this regard, the budgeting and funding strategy is the most significant and accessible. In a study conducted by Maassen (2000), the impact that the universities funding framework applied in a number of European states had on university staff, students and performance was explored. Furthermore, Powers (2000) discussed the use of financial resources as an internal incentive for strategy application in higher education institutions. Additionally, Liefner (2003) found that, although the university performance level and type were influenced by various methods of funding and budget allocation, this influence was not long-term.

From the viewpoint of Broadbent and Laughlin (2006), a major factor with a significant influence on the development and implementation of performance measurement systems in universities is the regulatory mechanism. What is more, of the various regulations promulgated by different authorities, they attributed the strongest influence on performance measurement systems in British universities to the regulations formulated by local funding councils and especially the Higher Education Funding Council of England (HEFCE). Because higher education around the world is mainly financed by governmental funding (Maassen, 2000), performance measurement systems in such institutions could be influenced by the government. As discussed previously in section 2.6, this is also applicable in the Saudi context where higher education is mostly financed by the government through annual budgetary allocations (Alkhazim, 2003; Ministry of Higher Education, 2005). Nevertheless, universities may be confronted with some additional issues as a result of the manner in which budgets are allocated.

Autonomy and decentralisation of higher education institutions is another issue that can be discussed. Despite the consideration that higher education institutions should enjoy decentralisation and autonomy, they should not be spared performance assessment or accountability. As such, Berdahl (1990) advised that, even though it may appear inaccessible in certain cases, the prevention of a conflict between the accountability requirements and the necessity for autonomy should be prioritised by governments. Although some may argue it is overstated, Leveille (2005) maintained that autonomous and independent decision-making is a crucial factor underpinning the success and high performance of institutions of higher education in the United States. He further contended that, in order to enhance university accountability, a system design must preserve its independence and autonomy, whilst also promoting student collaboration and ensuring transparency of activities to demonstrate achievement of primary goals and effective use of financial resources.

Budget autonomy was reported by Aghion *et al.* (2007) to increase the research performance of higher education institutions almost twofold. Apart from budget autonomy, they proposed that university performance can also be enhanced by greater autonomy in course development, admission, recruitment and rewarding system. Similarly, Wobmann (2007) noted that not only do universities with autonomy in recruitment, salary, budget allocation, and course design have a higher performance, but the achievements of their students are also greater. Furthermore, Kempkes and Pohl (2008) conducted a research based on the hypothesis that the expenditure and finance efficiency of German institutions of higher education in states which afford them greater autonomy exceeds that of universities located in states with stricter regulations and limited university autonomy. This hypothesis was validated on the basis of data acquired from 67 universities. The findings of the above studies clearly highlight that the need for autonomy and power of decision play an essential role in the ability of higher education institutions to become more efficient and perform better in all respects. This paragraph and the previous ones have attempted to cover the literature about challenges confronting universities and their effects on performance measurement systems but have not talked about the nature and use of performance measures in different contexts of higher education.

The research, teaching and service domains have been differentiated in the majority of studies investigating the performance of universities, and each domain has been associated with a number of performance measures. Clement and Stevens (1989) conducted a comparative analysis of the performance of different departments of a university based on a number of teaching, research, and service activities. Research performance was assessed on the basis of appraisal of the relevance of different published research and other projects. Moreover, student admissions, peer assessment and course content were relied on to evaluate education performance. Johnes (1992) stated that the primary performance measures applied by most studies concerned with the assessment of the performance of British institutions of higher education are research productivity, degree quality and student attrition. Despite the fact that the use of such measures is almost unavoidable, Johnes expressed the view that they cannot provide a precise performance assessment of university efficiency and productivity.

In their research, Sizer *et al.* (1992) investigated the definition and application of performance measures in universities in the UK and four other European countries. They asserted that factors such as political climate, budget system, and methods of quality assessment shape the function of performance measures in such universities. Moreover, the authors outlined a number of roles for performance measures, which are screening, evaluation, decision rectification, resource distribution and communication (Sizer et al., 1992). Furthermore, as reported by Guthrie and Neumann (2007), the

Australian government implemented a framework for the assessment of the performance of institutions of higher education based on three key performance indicators – financial feasibility, teaching, as well as research and research training.

A strategy for the evaluation of university performance in the areas of teaching, research, and support activities was also put forth by Suryadi (2007). Teaching performance was determined based on several criteria, including teacher competence, course quality, and diversity. Research performance was measured based on publications, whereas the performance of support activities was determined according to operational expenditure, efficient use of electricity. Performance measures are also provided by the BSC (Chen *et al*., 2006), which, in addition to a large number of public bodies, has also been applied in some higher education institutions. In short, a general agreement is yet to be established as to what constitutes appropriate key performance indicators for universities. Nonetheless, all related studies have applied reasonable indicators and have largely focused on the three central activity areas of teaching and learning, research, and support services.

The researcher has done a detailed search for literature related to higher education institutions in emerging economies and found studies in Iran, Egypt, UAE, and one Saudi Arabia. These studies are discussed in the following paragraphs.

Malekzadeh *et al.* (2001) looked at performance progress of Iranian medical science universities, with particular emphasis on aspects such as the rise in the number of universities, faculty members and graduate students, improvement in public healthcare and life expectancy, as well as the decline in infant and maternal mortality and infectious diseases. The findings of the authors revealed that Iranian medical science universities have a high performance in terms of development, contribution to the improvement of public healthcare, training, and national publications, whereas their performance with respect to international publications is still low.

Mehralizadeh (2005) also examined the level of decision-making autonomy that Iranian universities attained from the recent reform. The author investigated the implications of the reform for the three main university management areas of financing, performance quality, and organisational systems. He observed that this reform has largely overlooked internal and external clients. On the other hand,

Tarokh and Kaldi (2007) applied a human resource perspective to their study of the internal and external clients of universities in Iran. They employed a supply chain management model and contended that quality performance and the competences of graduates are not compatible with the requirements and desires of the industry. University graduates lack the necessary skills and qualifications to be viewed as an

internationally competitive workforce. In addition, given the fast-paced transformations undergone by the industry in terms of production technologies, universities must reduce their human resource life cycle to supply qualified workers to the industry quicker.

A survey was carried out by Ahmady *et al.* (2007) among three Iranian medical science universities with the purpose of determining the level of role pressure and job conflict experienced by faculty members in order to assess the impact on new academic reforms on faculty members. Results revealed an identical, high level of role pressure in each of the three universities with different performance rank and position. The causes of the job pressure faced by faculty members were identified as being incompatible expectations of colleagues and managers, inability to reach a high performance due to lack of appropriate resources, inadequate aptitudes to meet certain requirements, and an unacceptable degree of academic autonomy and freedom.

Bikmoradi *et al.* (2009) adopted a different approach in their research, attempting to determine what faculty members thought about the strategies employed by the Iranian government in the management of medical science universities as well as about academic leadership in those universities. In addition, the authors carried out a cross-sectional survey among six universities and reported a significant level of dissatisfaction with academic leadership due to weak organisational culture and norms as well as to ingrained behaviours. They further argued that the conflicts of interest between academic leadership and the designated management of the universities arose from bureaucratic processes, politicisation, centralisation, and traditionalism.

Applying an activity-based cost method, Gharun (2007) aimed to put forth a more reasonable strategy of establishing the budget per student for different universities and course degrees. The author proposed that the university budget per student should be calculated based on three types of factors underlying university expenditure, namely, educational factors, environmental factors, and student capacity and number. Moreover, the author stated that universities are likely to perceive the employment of a modern costing technique in budgeting as a sign of fair treatment, thus encouraging them to enhance their performance.

According to Farid and Nejati (2008), at present, quality competition is a major issue confronting universities in Iran. In other words, the success of universities depends on their ability to produce large numbers of qualified graduates, ability which serves to attract and retain more students. Universities that lack this ability are not so attractive to prospective students; a reduced level of student registration leads to a decrease in the funds allocated, diminished job security, and heightened risk to the very survival of

the university. In light of these prospects, the two authors suggested that the implementation of a BSC method can be useful in helping the university managers to achieve an increase in the quality and performance of the university. In addition, by applying the BSC, Farid *et al.* (2008) focused on identifying the key performance indicators implemented in the institutions of higher education in Iran that are attributed the greatest importance. They found that the major performance measures associated with an educational balanced scorecard included student and faculty member satisfaction, the student to academic staff ratio in graduate course degrees, a rise in the number of students wishing to pursue higher education studies, as well as the extent of culture availability based on performance.

Adel (2009) carried out a survey to determine the most important enabling factors that cause the higher education institutions in Egypt to pursue higher performance. The data exposed that Egyptian universities have a number of essential enabling factors that have a direct influence on performance outcomes. She stated that enhancing these factors would have a consequent improvement in the overall excellence for universities. Badri and Abdullah (2004) conducted an examination of how universities could operationalise performance measurement for faculty with regard to teaching, research and services. They developed an analytical hierarchy process model to enable university managers to combine performance measurement with academic rewards and objectively compare performance of faculty staff. This model was examined in the context of an Emirati university with motivating results.

The only study found on performance measurement systems in Saudi higher education institutions was the one by Al-turki and Duffuaa (2003). They attempted to introduce a measurement system for the performance of academic departments. Based on a number of special characteristics for academic departments, they proposed a hierarchical system of performance measures covering areas in the inputs, processes and outcomes. Input measures include faculty utilisation, course offering and laboratory, quality of income students, quality of graduate students and research assistance and support staff capabilities. Process measures include teaching and learning process, research administration process and administration process. Outcome measures include quality of graduates, quality of research and scholarship and quality of community service. The proposed system was implemented in the context of a Saudi higher education institution and had a number of practical suggestions. They stated that, in order to effectively implement the performance measurement system, an academic information system is required. They added that the information system should have the capabilities of storing, retrieving and processing real data into performance measures.

## 3.4 Conclusion

The literature review chapter attempted to cover a broad perspective of prior knowledge related to the issue of performance measurement systems in the public sector. This has assisted to expose important issues and identify a number of gaps to be bridged in the present study.

The literature review confirms that there are contradictory results in accounting studies that have been motivated by a number of theories and concepts such as Institutional Theory and New Public Management. Therefore, there is still a need for more studies in order to achieve consensus on conclusions about fundamental issues. In addition, there has been a call for more contextual understandings of public sector accounting in unexplored settings (Broadbent, 1999). Universities, in particular, are important settings in which little research has been undertaken examining the phenomenon of performance measurement systems (Broad and Goddard, 2010). This lack of research is more obvious in the context of developing countries (Waal, 2007). The situation of Saudi Arabia as a developing country in this sense is even worse, for which only one study was found. Cultural and environmental issues can be major sources of differences and may provide a good testing ground for the concept of performance measurement. Whilst the literature provides insights into how performance measurement systems could be used within higher education institutions, there exists very limited research into issues affecting the implementation and longevity of such systems. There is still a need for more research to provide a "behind the scenes" account of the experiences of Saudi universities in developing their internal performance measurement practices.

The review of existing literature helped the researcher to understand the context of performance measurement and its situation and usage in the public sector and higher education in particular. In addition, this review assisted to understand the applications of performance measurement systems in developing countries. This study then seeks to address some of the uncertainties that still exist around how performance measurement systems operate within the context of higher education in developing countries, and therefore, this study is going to adopt an exploratory grounded theory methodology in order to answer the broad question of how do performance measurement systems work within Saudi universities. To that end, it is going to be using two different institutions in Saudi Arabia using a very detailed and in-depth study of grounded theory to help address this very general question with further insights to be developed.

The next chapter, discusses the different methodologies that have shaped and informed research in accounting, as well as their underlying assumptions. It highlights some paradigmatic frameworks and outlines the interpretive paradigm that has been suggested for this study and justifies this choice.

# CHAPTER 4: RESEARCH PHILOSOPHY

It has been argued that there are different frames through which the world can be viewed and that an individual's outlook is based upon a set of theoretical and philosophical assumptions (Burrell and Morgan, 1979; Morgan and Smircich, 1980; Tomkins and Groves, 1983; Hopper and Powell, 1985; Chua, 1986). Researchers must clarify these assumptions and recognise those underlying their own studies in order to assess whether or not they are consistent with their beliefs (Burrell and Morgan, 1979; Hopper and Powell, 1985). Other factors that lead researchers to clarify their research philosophy include: 1) specifying the research methods to be used in their studies. This includes the type of data to be collected and its sources, as well as the methods by which such data will be analysed, 2) assessing different methodologies and avoiding those that are inappropriate by identifying the limitations of such approaches, and 3) being creative in selecting and adapting new methodologies that fall outside their experience (Easterby-Smith et. al., 1997).

Considering this need, this chapter discusses the various methodologies that have shaped and informed research in accounting, as well as their underlying assumptions. Section 3.2 discusses Burrell and Morgan's (1979) paradigmatic framework and highlights its application in accounting research, as suggested by Hopper and Powell (1983). Section 3.3 outlines alternative paradigms that have been suggested in accounting research. Section 3.4 examines the debate between functionalists and interpretivists and, further, justifies the choice of interpretive methodology.

## 4.1 Paradigms in accounting research

Burrell and Morgan's (1979) sociological paradigmatic framework is a good starting point, appearing to provide an academic understanding of the complexity of general social science research. It is also taken seriously in accounting literature, providing several classifications. Burrell and Morgan's central argument is the idea that "all theories of organisation are based upon a philosophy of science and a theory of society" (Burrell and Morgan, 1979, p.1). This idea was adopted by Hopper and Powell (1985), who used it to classify accounting research in relation to two sets of assumptions regarding the nature of social science and social concepts in general. These two sets of assumptions are discussed in turn below.

### 4.1.1 Assumptions about the nature of social science research and social concepts in general.

These assumptions consist of four distinct but connected components: ontology, epistemology, human nature and methodology. ***Ontology*** concerns itself with assumptions of nature and the essence of the phenomenon/phenomena under research. These basic assumptions pose the question of whether reality exists and is given independently of human cognition and interpretation or whether it is in fact the product of one's mind. Two contrasting perspectives, therefore, are identified: the realist and nominalist approaches. Realists assume that the social world has a reality independent of human appreciation and is comprised of regular and stable structures. Thus, the phenomena studied are considered "hard", in the sense that they do not depend on people for their reality. In contrast, nominalists assume that the social world depends on how people understand it. They believe that this world is no more than names and concepts that are used to structure reality. The reality of the phenomena under investigation, therefore, is considered "soft" in the sense that it depends upon human observation (Burrell and Morgan, 1979, p.4).

***Epistemology*** is concerned with assumptions of the nature of knowledge and truth and how they are attained (Burrell and Morgan, 1979), or "the relationship between the knower or would-be knower and what can be known" (Guba and Lincoln, 1994, p.108). There are two extreme approaches regarding this relationship. Positivists, at one extreme, assume that knowledge is objective and that truth and falsity exist independently of experience. Knowledge, therefore, is considered hard, real and interpersonal. This implies that people can confidently explain, share and predict what occurs in the social world by examining causality in relationships between variables. They believe that a stock of knowledge grows in a cumulative process by adding new insights to existing knowledge and by removing false presumptions. Anti-positivists (interpretivists), at the other extreme, assume that knowledge is subjective and that understanding the social world is essentially dependent on what people believe and how they act. Thus, the would-be knower has to look in depth, rather than width, in order to understand the actions and interactions of participants who are directly involved in the activities under research (Burrell and Morgan, 1979).

***Human nature*** is a third set of assumptions offered by Burrell and Morgan (1979); this is linked to the previous two sets but is conceptually isolated from them. It is concerned with the relationship between human beings and their surrounding environment. Burrell and Morgan (1979) point out that human nature may be considered from the viewpoint of determinism or voluntarism. The former refers to the idea that all action is completely determined by external circumstances. This means

that human behaviour is predictable and so explanations of why people act are less important than general explanations. The latter indicates that human nature is entirely free-willed and autonomous. Therefore, explanations of why people act are crucial and should be taken seriously (Burrell and Morgan, 1979).

The three sets of assumptions (ontology, epistemology and human nature) have direct and critical consequences on the question of ***methodology***; that is, "how can the inquirer (would-be knower) go about finding out whatever he or she believes can be known?" (Guba and Lincoln, 1994, p.108). The nomothetic approach might be the answer when individuals are seen to have less impact on their environment, and reality and knowledge are viewed as hard, objective and independent of cognition. In this case, emphasis is likely to be placed upon analysing relationships and finding general explanations for apparently diverse phenomena. The approach, therefore, concerns itself with developing general "laws" of human behaviour. In contrast, when the subjective view is adopted as the preferred philosophy for looking at reality, knowledge and the environment, the ideographic approach might be appropriate. This implies that researchers must explore in depth each activity in order to find specific explanations and to help gain a deeper understanding of individual phenomena. In this case, there are no laws of human behaviour as people are seen to be independent (Burrell and Morgan, 1979).

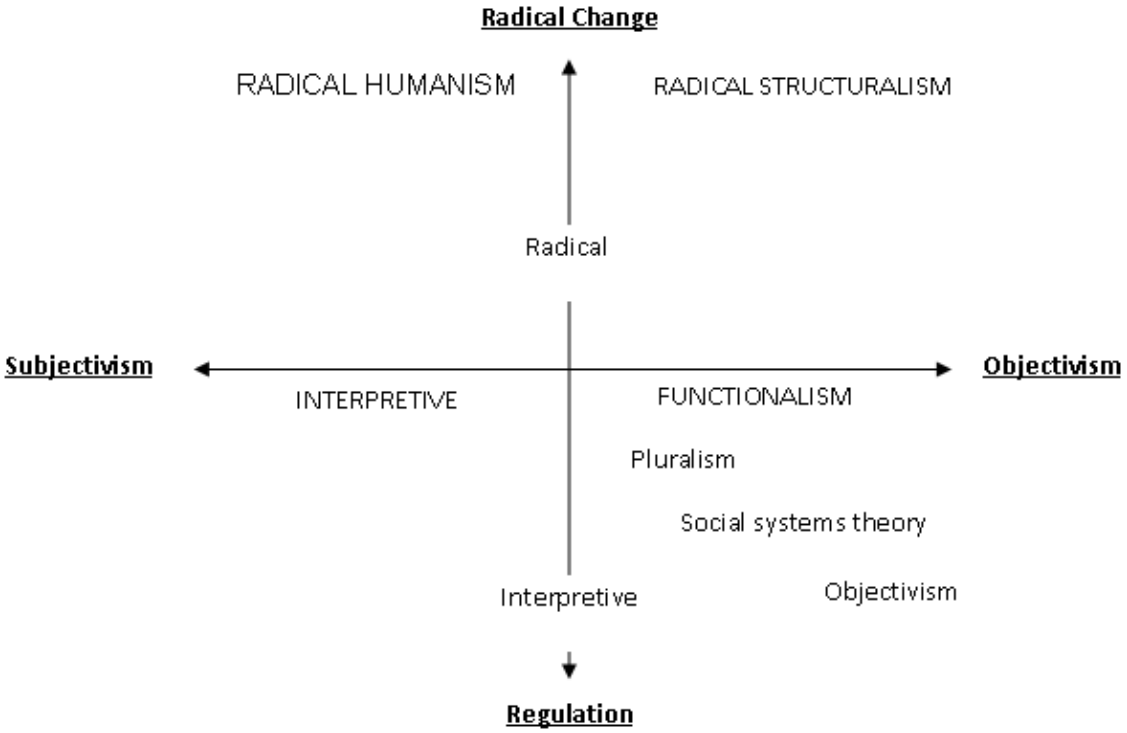
Hopper and Powell (1985) point out that the dichotomy between the objective and subjective approaches created by Burrell and Morgan is questionable. Instead, they regard this dimension as a continuum, as initially constructed by Morgan and Smircich (1980).

The second aspect of Burrell and Morgan's theoretical framework is social assumptions, which revolve around the "order-conflict debate" (Burrell and Morgan, 1979, p.16). The order theories are said to emphasise stability, integration, functional co-ordination and consensus. The conflict theories, on the contrary, are concerned with change, conflict, disintegration and coercion. The order-conflict distinction was seen to be problematic and was subsequently replaced by the conceptions of "regulation vs radical change" (Burrell and Morgan, 1979, p.16). The sociology of regulation denotes the idea that researchers should focus on understanding life as it is and how stability is created. Radical change is another type of sociology that is more critical of the existing world. It attempts to provide analysis of conflict, domination and contradiction, thought to be characteristics of the modern world that must be radically changed (Burrell and Morgan, 1979).

### 4.1.2 A paradigmatic framework for accounting

Combining the two principle dimensions (subjective vs objective and regulation vs radical change) in one framework, Burrell and Morgan (1979) developed a 2 x 2 dimensional matrix identifying four interactive and mutually exclusive paradigms that are claimed to form the basis for social research. These four are the functionalist, interpretive, radical humanist and radical structuralist paradigms. Each paradigm shares various characteristics with its horizontal and vertical neighbours in one of the two dimensions, and differs in the other. Hopper and Powell (1985) modified the framework by combining the last two radical paradigms to make three main categories: the functional, interpretive and radical paradigms (see figure 4-1).

**Figure 4-1: Accounting Paradigms**




*Source: Hopper and Powell, (1985)*

The ***functionalist*** paradigm is the dominant paradigm for organisational studies. It adopts the objective standpoint of regulation of the social world. It seeks to provide rational explanations of social affairs through the adoption of realist, positivist, determinist and nomothetic points of view. Hopper and Powell (1985) further divided this paradigm into three sub-categories: objectivism, social systems theory and pluralism. Objectivism is positioned in the most regulatory and objective area of the paradigm. The approach forms the basis of many forms of conventional management accounting, such as standard costing, budgetary control, closed systems theory and

neo-classical economics. Conventional management accounting is criticised because of its elimination of behavioural aspects that differentiate between the organisational world and the physical world (Hopper and Powell, 1985).

In view of this, social systems theory was developed. This has also shaped much management accounting literature but with more complicated models of motivation and organisational design. This school of thought consists of several sub-schools, such as accounting dysfunction, social psychological studies, structural studies, psychological studies, open systems theory and contingency theory. Pluralism is the third school within the functionalist paradigm. It addresses the issues of power and conflict more strongly than the other two schools and can be found in areas such as industrial relations and financial reporting.

The ***interpretive*** paradigm adopts an implicit subjective view of regulation of the social world. It considers reality to be subjective and phenomenological, as it can be understood better through investigating what people perceive it to be. This paradigm does not intend to create any changes to the world. Researchers are treated as participants in the social process, in which they expand their understanding of the actions and interactions of its components (Burrell and Morgan, 1979). Many accounting researchers call attention to the lack of, and the need for more, accounting research undertaken in this paradigm (for example, Hopper and Powell, 1985; Chua, 1986). This paradigm will be further discussed later in this chapter.

The ***radical*** paradigm has two parts: radical structuralism and radical humanism, as suggested by Burrell and Morgan (1979). These paradigms have much in common with the functionalist and interpretive paradigms in terms of objectivity and subjectivity. However, they differ in the sense that they adopt the perspective of radical change and do not recognise consensus or integration. Rather, they view the world as being composed of negative parts and managed by a dominant power (Burrell and Morgan, 1979). Hopper and Powell (1985) attempted to combine the two parts into one paradigm, arguing that both parts should to be considered as "dialectical aspects of the same reality" (Hopper and Powell, 1985, p.451).

The mutually exclusive nature of Burrell and Morgan's framework has been criticised by several scholars (see, for example, Hopper and Powell, 1985; Chua, 1986; Laughlin, 1995) who prefer to treat these paradigms as a continuum. Several researchers also address the simplicity of this framework. Hopper and Powell (1983), for example, point out that it is foolhardy to claim that all social science can be classified according to just two dimensions. Despite such criticisms, this framework has nevertheless proved

highly influential in the context of accounting and has been widely used in academic literature.

## 4.2 Other frameworks in accounting research:

Three alternative frameworks proposed by Tomkins and Groves (1983), Chua, (1986), and Laughlin (1995) are now discussed in turn.

### 4.2.1 Tomkins and Groves (1983)

The aim of Tomkins and Groves' work is to highlight the importance of viewing accounting as a social, organisational and societal phenomenon. Considering this importance, the authors question the relevance and appropriateness of the so-called "scientific methodology", claiming that it is inappropriate for certain types of social study. They suggest that a "naturalistic methodology" should be employed in accounting literature. To advance this issue, they used the framework of Morgan and Smircich (1980), who proposed a continuum of six basic ontological assumption sets, in order to explore the range of research styles available in accounting. At one end, the continuum has a most objective category, with reality as a concrete structure, in which the social world is considered concrete, certain and physical. At the other end, the continuum has a most subjective category, reality as a projection of the human imagination, in which reality is considered to exist only in the human imagination and consciousness (Tomkins and Groves, 1983). They emphasise that the nature of the phenomena under investigation determines the appropriateness of the research approach.

Morgan (1983) agrees with Tomkins and Groves (1983) that accounting, like other social sciences, requires that alternative research approaches be identified in order to examine social phenomena in accounting practice. However, he does not agree with the idea of linking each research paradigm with a particular set of ontological assumptions. He argues that there might be no straightforward rules for deciding what is likely to produce good research (see also Willmott, 1983; Abdel-khalik and Ajinkya, 1983).

### 4.2.2 Chua (1986)

Chua also believes that every piece of accounting research is based on its underlying assumptions and beliefs. Like Hopper and Powell (1985), she divides accounting studies into three groups: mainstream accounting, critical paradigm and interpretive paradigm. Her classification is based on a set of assumptions about knowledge

(epistemological and methodological assumptions), assumptions about reality (ontological, human intention and rationality and societal order/conflict) and the relationship between theory and practice. Unlike Burrell and Morgan's framework, Chua's framework does not present a dichotomy or mutual exclusivity.

***Mainstream accounting*** refers to the dominant functionalist (positivist) paradigm. As per Burrell and Morgan (1979), theory is separate from observation and therefore may be used to verify or falsify a theory. Researchers within this paradigm adopt hypothetico-deductive models using various scientific quantitative methods. Reality is considered objective and independent of cognition. People are deemed to be knowledgeable, purposive, utility maximisers. Regarding societal order/conflict assumptions, Chua points out that there is a dysfunctional conflict that might be controllable. In addition, within this paradigm, accounting is considered neutral. It tells what will happen independently of social and organisational circumstances (Chua, 1986).

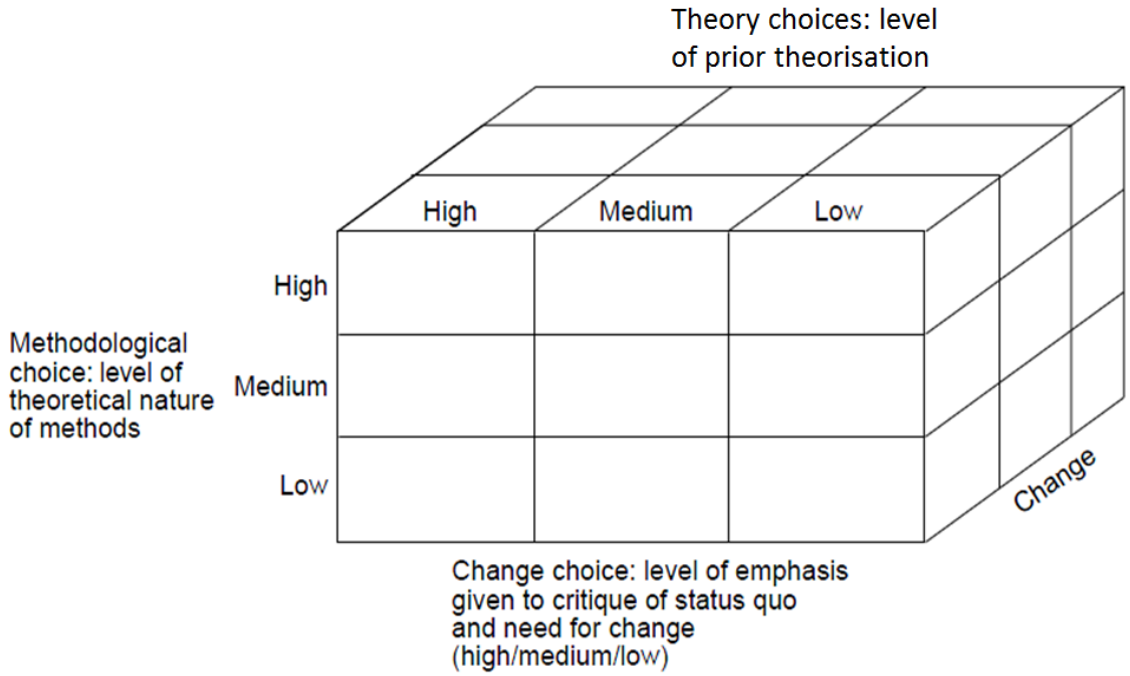
Within the ***interpretive paradigm,*** reality is assumed to be subjective and can only be understood in terms of the cultural, social and organisational processes that inform its development. Within this perspective, truth is also subjective: it cannot be appropriately deduced outside its context. The rationality in this paradigm is to understand and improve wellbeing, following whatever methods are appropriate. Unlike the mainstream accounting, accounting within the interpretive paradigm is not assumed to be neutral (Chua, 1986).

The ***critical paradigm*** refers to the radical approach (Burrell and Morgan, 1979), in which human beings are assumed to have inner potentialities that are "alienated through restrictive mechanisms" (Chua, 1986, p. 622). Under this perspective, accounting is considered a "discourse with a particular mode of calculative rationality" (Chua, 1986, p. 623).

### 4.2.3 Laughlin (1995)

This is another paradigmatic framework that is widely cited in accounting research literature, forming the basis for many published and unpublished research studies (Guthrie and Parker, 2004). Laughlin (1995) starts with the framework of Burrell and Morgan (1979), which he considers to have provided social science research with a useful classification scheme although he criticises it for being too simplistic. He classifies accounting research in three dimensions: theory, methodology and change (see figure 4-2).

**Figure 4-2: Laughlin's Classification of Accounting Research**




*Source: Laughlin (1995)*

The theory dimension (Burrell and Morgan's ontological and epistemological assumptions) refers to the level of prior theorisation. Laughlin (1995) points out that high levels of prior theories refer to an assumed material world which, in turn, has high levels of generality order. Conversely, low levels of theories mean that the world is not material and is a projection of people's minds, which indicates that generalities are impossible since such projections differ.

The methodology dimension (Burrell and Morgan's human nature and methodology assumptions) refers to the level of the theoretical nature of methods. A high level of theoretical nature means that the chosen research methods are highly defined, making the researcher irrelevant to the research process. However, a low level of theoretical nature means that the researcher is encouraged to be involved in the observation process. The change dimension (Burrell and Morgan's society assumptions) refers to the main objective of the research, whether it is to create change or there is little importance and emphasis on effecting changes (Laughlin, 1995).

To sum up this discussion about the different paradigmatic frameworks within accounting research, there is no single perfect approach to follow. The main factor that determines the adoption of one framework is its provision of a clear and comprehensive picture of accounting research. Simplicity is also required, providing

the researcher with a more flexible framework that may be expanded according to the research needs. Therefore, Burrell and Morgan's framework is seen as appropriate, even if some details are excluded.

## 4.3 The paradigmatic debate and the choice of the interpretive paradigm:

The paradigmatic debate between functionalists and interpretivists has continued for a long time (Goulding, 2005), based on different theoretical and intellectual justifications. Functionalists, on the one hand, aim at replication and generalisation. They claim that collecting and analysing data should be undertaken in such a way that another researcher collecting and analysing similar data under similar circumstances will find similar results. They rely on quantitative and scientific methods, perceived as being more accurate than qualitative evidence (Chua, 1986; Laughlin, 1995). On the other hand, interpretivists do not aim to replicate. Their purpose, instead, is to find results that are representative of the understanding of the people involved in the phenomenon under investigation. Therefore, the important factor for evaluating interpretive data analysis is its ability to provide plausible interpretation and well-grounded explanation of phenomenon, so that a deep understanding may be obtained (Goulding, 2005).

This researcher believes that reality is subjective and is the product of one's cognition: knowledge is seen to be soft and is better understood from the individual's viewpoint. This study, therefore, can be placed within the subjective dimension of Burrell and Morgan's framework (i.e. the radical humanist paradigm and the interpretive paradigm). The main objective of the research must then be clearly identified in order to choose one of the above two paradigms. This study aims to understand and explore the use and perceptions of performance measurement systems (PMSs) in Saudi higher education (SHE) and does not intend to create any changes in this phenomenon. For that reason, the radical humanist paradigm is eliminated and this study is mainly located in the interpretive paradigm. Three other reasons can be identified to justify the adoption of this paradigm, which is exhorted by many accounting researchers (Tomkins and Groves, 1983; Morgan, 1983; Modell, 2004).

Firstly, PMSs in the public sector in general, and in higher education institutions (HEIs) in particular, are relatively new. They are less developed in third world countries (such as Saudi Arabia), where accounting systems in general are still not fully formed (Al-Dehailan, 2004). Thus, it would be difficult to identify a set of prior hypotheses for testing, which has an impact on the researcher's choice of the methodology, as

claimed by Kaplan (1993) and Otley and Berry (1994). Laughlin (1995) calls for more interpretive research when low levels of theory occur. Therefore, the functionalist approach may contribute very little when applied to this immature and developing concept.

Secondly, the existing literature associated with the phenomenon studied mostly focuses on the western context, the culture of which is different to Saudi Arabia. Deriving a set of hypotheses from an American study, for instance, might be inappropriate, as different societies and cultures may reveal different results as suggested by Strauss and Corbin (1998). They suggest the use of interpretive methodology and its related qualitative approach for foreign students who are studying in western universities and wishing to conduct research in their own countries. They point out:

*"It is important that other countries do not borrow theories but instead develop their own, ones that reflect their societies' or citizens' cultures and behaviours"* (Strauss and Corbin, 1998, p287).

Cultural differences create particular circumstances and characteristics, which might influence the way management techniques are perceived and practiced. In the Arab world particularly, it is argued that there is an Arab style of management claimed as significant and distinctive (Weir, 2001). Therefore, within this different context it might be difficult to produce findings through the adoption of functionalist methodology, with its quantitative approach.

Thirdly, interpretive methodology and its qualitative approach tend to have greater benefits for investigating complex organisations, such as HEIs. Researchers should employ a method that provides them with rich and comprehensive explanations of the complexities that affect the phenomena studied, rather than select a method that ignores or simplifies such complexities (Lye *et al.,* 2006). This suggests an interpretive methodology, capable of capturing complex meanings that might be difficult to achieve quantitatively.

## 4.4 Summary

This chapter has highlighted several frameworks within accounting research. Burrell and Morgan's (1979) framework was the starting point for the discussion and also the final selection as an appropriate framework to adopt. Other frameworks have been discussed in order to provide a comprehensive view of the classification used in accounting research. The interpretive paradigm has been selected as the suitable

approach for this research. This methodological choice was justified by the researcher's personal beliefs about ontology, epistemology, human nature and society. Other factors, such as cultural differences, prior theorisation level and organisational complexity, support this choice.

# CHAPTER 5: GROUNDED THEORY METHODOLOGY

## 5.1 Introduction

The previous chapter illustrated the interpretive nature of this research. This chapter clarifies the adopted methodology and consequential data collection and analysis methods. The methodology utilised for this research is Strauss and Corbin's (1998) grounded theory analysis of a multiple case study. The approach aims to construct theory about the use of performance measurement systems in Saudi universities. This theory should be grounded upon what people say and feel about this phenomenon. The following sections will provide a general overview of grounded theory, with special consideration of the use of this methodology by accounting researchers. The rationale and justification for this choice of research methodology and methods will be outlined in this chapter. Theoretical and practical issues about the data collection methods are discussed; however, details of the use of grounded theory to develop the theoretical framework for this research are dealt with in the analysis chapters.

## 5.2 Grounded Theory

The key reason for choosing grounded theory as a research methodology is that it provides the researcher with a systematic guidance to induce theory from the collected data in order to interpret the phenomenon under investigation (Strauss and Corbin, 1998, Charmaz, 2000). A second reason is that accounting researchers are encouraged to utilise this methodology in order to enrich both theoretical and practical accounting knowledge (Parker and Roffey, 1997; Ley *et al.,* 2006). The following sections provide an overview of the evolution of grounded theory, extended approaches of grounded theory, recent debates and the use of grounded theory in accounting research.

## 5.3 Origins of Grounded Theory

Barney Glaser and Anselm Strauss first introduced the concept of grounded theory in their book *The Discovery of Grounded Theory* in 1967. It was intended to build theory systematically, grounded in the words, actions, interactions and behaviour of the subjects under research. Although the two co-authors came from different academic backgrounds, their views coincided on several issues. They stated that research was designed mostly to test prior knowledge or to extend current theories through logical

deduction. They thus believed in the importance of generating new theories through understanding reality and by approaching the field to induce theory from data (Glaser and Strauss, 1967).

*"We would all agree that in social research generating theory goes hand in hand with verifying it; but many sociologists have diverted from this truism in their zeal to test either existing theories or a theory that they have barely started to generate."* (Glaser and Strauss, 1967, p.2).

Grounded theory therefore tends either to generate theory where little is already known or to provide a fresh viewpoint on existing knowledge. The theory continually evolves during the research process due to the constant interplay between data collection and analysis (Glaser and Strauss, 1967; Goulding, 2005). According to Glaser & Strauss (1967), the developed theory should have several attributes regarding its usefulness and credibility: *"to enable prediction and explanation of behaviour, to be useful in theoretical advance in sociology, to be usable in practical applications … to provide a perspective on behaviour and to guide and provide a style for research on particular areas of behaviour"* (Glaser and Strauss, 1967, p.2).

However, there has been disagreement on how the method is conceptualised and two different approaches of grounded theory have emerged. This is mainly because Glaser and Strauss did not share the same beliefs about the principles, aims and procedures of grounded theory (see table 5-1).

**Table 5-1: Grounded Theory Differences**

| | Strauss and Corbin (1990, 1998) | Glaser (1992) |
|---|---|---|
| Start point | Broad research question | Blank sheet |
| Theoretical sensitivity | Background experience and analytical skills | Understanding, conceptual insight and the ability to give meaning to data |
| Use of the literature | Little prior knowledge is required before entering the field; a deeper use of the literature when categories have emerged | Literature should be reviewed only after the theory has emerged |
| Analysis | Open coding, axial coding and selective coding | Patient analysis using the constant comparison method and the core category will emerge automatically |
| Enhancing theoretical sensitivity | Use of questioning | Constant comparison method |

*Adapted from Lye et al. (2006)*

## 5.4 Extensions of grounded theory

As shown in figure 5.1, there are two main grounded theory approaches in use: Strauss and Corbin's systematic approach and Glaser's emergence approach. Strauss and Corbin, (1990, 1998, and 2008) in their text *Basics of Qualitative Research: Grounded Theory procedures and techniques,* introduced a modified view of grounded theory that differs from the originators' view in many aspects. Strauss and Corbin's grounded theory can be described a structured and pragmatic approach of theory building. They suggest that the researcher take an active role in developing the theory: he/she is allowed to select a focal topic to start the study. They also permit researchers to use prior knowledge (i.e. prior literature, personal and professional experience) to enhance their ability of conceptualisation. Another major difference is that they suggest a systematic analysis procedure by using the three stages of coding. Open coding is the first stage: the researcher identifies a set of initial and unrelated codes, which are then clustered under a number of categories. Axial coding is the second stage, whereby the data undergoes a more complex process of abstraction. In searching for a core category, subcategories are linked together to form the main categories. The final stage is selective coding, in which a core category is selected and linked with other categories. This process also involves validating the relationships between categories and completing other categories that need further development (Strauss and Corbin, 1990, 1998, 2008).

Glaser's (1992) grounded theory takes the approach of maintaining an open attitude towards the research area in circumstances where the researcher is professionally inexperienced (Warburton, 2005). He suggests selection of a broad area to study and limited literature to review, as the researcher's predetermined beliefs may push data in the wrong direction. In his text *Basics of Grounded Theory Analysis,* he criticises Strauss and Corbin's structured stages of analysis as forcing theory as opposed to allowing it to emerge automatically from data. He says that this may lead to the development of an untrue grounded theory. In the second edition of Strauss and Corbin's text, they state that their approach does not encourage generating a theory with another theory in mind but this is permitted if the objective of the research is to extend existing theory (Strauss and Corbin, 1998). Similar to Strauss and Corbin, Glaser suggests the use of "open" or substantive coding and theoretical coding (selective coding as per Strauss and Corbin) as essential stages for theory construction. During substantive coding, initial concepts are identified from data, while more abstract coding is undertaken during the theoretical coding stage.

## 5.5 Recent debates

Charmaz (1990, 1995, 2000, 2003, 2005 and 2006) introduced a new dimension described as constructivist grounded theory, which draws on the original view of Glaser and Strauss. She questioned the objectivist and positivist assumptions of the traditional grounded theory and its emphases on logical, procedural, comparative and conceptual analytical framework (Charmaz, 2005). Charmaz stated:

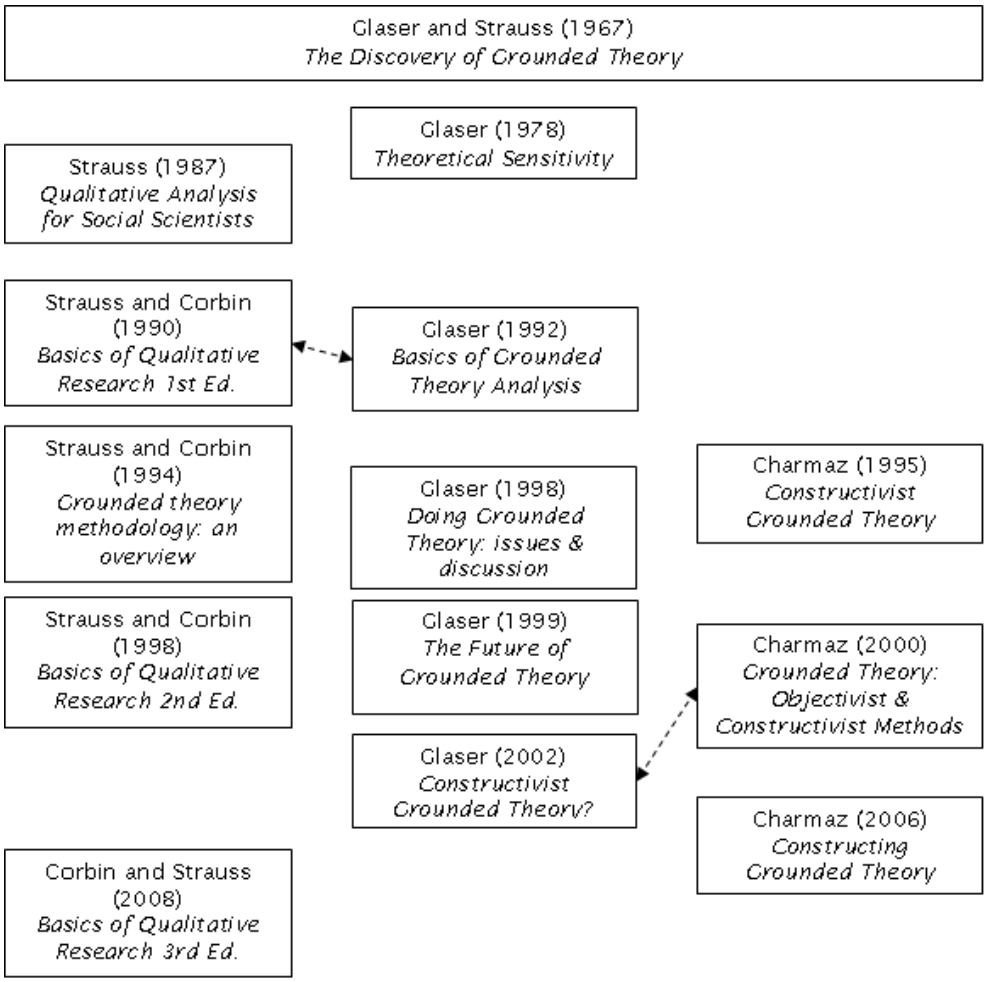
*"A constructivist approach emphasises the studied phenomenon rather than the method studying it… It does not assume that data simply await discovery in an external world or that methodological procedures will correct limited views of the studied world. Nor does it assume that empirical observers enter the research scene without an interpretive frame of reference" (Charmaz, 2005, p.509).*

She suggests that what the researchers observe in the field is dependent upon their prior interpretations and interests, as well as their relationships with the context and the participants (Charmaz, 2005). Therefore, a core assumption of constructivist grounded theory is that data is constructed through a continuous interaction between the researcher and the participants, as well as the dialectical nature of actions and meanings relationship, where meanings shape actions and actions affect meanings (Hallberg, 2006).

Hallberg (2006) indicates that Charmaz's approach falls between positivism and post-modernism, while Glaser (2002) states that novice researchers should be careful not to let Charmaz's thinking remodel grounded theory.

Orton's (1997) iterative grounded theory was another redefinition of Glaser and Strauss's work. His main argument is the creation of a methodological position between induction and deduction. This approach differs from traditional grounded theory by permitting theory to take part in the analytical framework (Orton, 1997).

Figure 5-1: Development of Grounded Theory




*Adapted from: Warburton, (2005)*

### 5.5.1 A review of grounded theory within accounting research

Since its discovery, use of grounded theory has spread to other disciplines, such as education, nursing, management and information systems. The adoption of this methodology is also growing in accounting literature (see table 5-2). Tomkins and Groves (1983) were the first writers to bring the concept of grounded theory in data to the attention of accounting researchers.

*"Care is needed: numerical 'data dredging' may be valuable as one form of grounding theory in research data rather than testing completely pre-conceived hypotheses"* (Tomkins and Groves, 1983, p.365).

In the same issue of *Accounting, Organisations and Society*, Covaleski and Dirsmith (1983) notably made use of grounded theory in attempting to understand budgeting

use in nursing services at a decentralised hospital. They found that budgeting is more complex than traditionally viewed and may be used for negotiation purposes to advocate desires of subunit. This use of budgets suggests a bottom-up flow of information, which is the image that the hospital desired to depict to its environment. The study aimed to generate a theory in a substantive area and, hence, followed Glaser and Strauss (1967) view of theory building. Further, Covaleski and Dirsmith (1984, 1986, 1988) then respectively examined the budgetary process of power and politics, building tents for nursing services through budgeting negotiation skills, and the use of budgetary symbols in the political arena. The authors did not explicitly state the use of grounded theory but their studies can be categorised as informed by Glaser and Strauss's (1967) view (Parker and Roffey, 1997; Parker, 2001; Gurd, 2004). In an analysis of changes in organisational control related to changes in an organisation's economic situation, Czarniawska-Joerges (1988) also utilised grounded theory as suggested by Glaser and Strauss. In a second study, she and her colleague applied the methodology to examine links between budget processes and the cultural context of organisations (Czarniawska-Joerges and Jacobsson, 1989).

Slagmulder (1997) used Strauss and Corbin's (1990) approach to understand the design of management control systems within an organisation, together with how they were used to align strategic investment decisions with the organisation's strategy. The core theme of her theory is that attaining strategic alignment is the main reason for designing a management control system for strategic investment decisions. Baxter and Birkett (1998) employed a form of Strauss's (1987) grounded theory to examine the ways in which an individual in an Australian organisation became its Chief Financial Officer. In an ethnographic study using Strauss & Corbin's (1990) approach of grounded theory, Abdul-Rahman and Goddard (1998) attempted to study accounting and accountability in two Islamic religious organisations. They pointed out that the notion of sacred/secular divide argued in Christian organisations does not apply in Islamic enterprises. In 2002, they employed a combination of Strauss and Corbin (1990, 1998) and Glaser's (1978) approaches and encouraged the use of grounded theory in accounting research (Abdul-Rahman and Goddard, 2002). Another example of employing grounded theory was undertaken by Greenhalgh (2000) in an attempt to understand how a transnational small or medium-sized enterprise controller uses management accounting to cope with complexity. The research was informed by Orton's (1997) approach of iterative grounded theory.

Meanwhile, Parker conducted two studies to investigate the shape and context of planning and control processes in a large Australian religious organisation and to identify factors that distinguish these processes from those used in private sector organisations (Parker 2001, 2002). He analysed his data according to Strauss and

Corbin's systematic approach. In 2003, Parker conducted a further study to provide a theoretical framework interpreting the main concern of financial management debates in welfare organisations and the factors and strategies that shape these debates at board level. The study was informed by Glaser's approach, although Strauss and Corbin's coding method was followed in analysing the data. He justified his choice of Glaser's approach as it allows the theory to emerge from the "the actors' primary concerns" (Parker, 2003, p.342). In a study of the use of activity-based information in two British banks, Norris (2002) utilised Strauss and Corbin's grounded theory principles. She distinguished her use of grounded theory from that of Strauss and Corbin by using multiple case studies, in which cases were analysed individually with subsequent data collection not influenced by the analysis of earlier data. This exploratory study therefore used grounded theory as a technique to identify categories, rather than as a means to generate a general theory.

Goddard (2004, 2005) conducted studies of the relationship between accounting, governance and accountability in British local government. He respectively found that budgetary practices were the most important organisational process regarding accountability and that accountability was more important than governance. Together with Strauss and Corbin's grounded theory approach, Goddard also used Bourdieu's concept of habitus for theoretical explanation. In an investigation for understanding accounting processes and reporting in three Tanzanian non-governmental organisations, Goddard and Assad (2006) executed a grounded theory strategy (Strauss and Corbin, 1990, 1998) as the principal methodology. They found that the primary role of accounting in the organisations studied was its symbolic use in navigating organisational legitimacy. Ley *et al*. (2006) called for more grounded accounting theories. They suggest the use of the naturalistic approach and specifically propose the grounded theory method for its ability to ground theory on empirical evidence of complex phenomena.

The most recent accounting studies to apply grounded theory are those by Aseeri and Broad (2007), Broad *et al.,* (2007), Efferin and Hopper (2007) and Tillmann and Goddard (2008). Asseri and Broad (2007) used Strauss and Corbin's principles to understand why and how the Balanced Scorecard is used in a large Saudi Arabian company and the extent to which executive managers favour its effectiveness for financial performance. Broad *et al*. (2007) also used Strauss and Corbin's grounded theory to explore the relationship between strategy, accounting and performance measurement in local government and higher education institutes. In exploring socio-cultural aspects of management control systems in a Chinese Indonesian company, Efferin and Hopper (2007) found Strauss and Corbin's approach helpful. Tillmann and Goddard (2008) used Strauss and Corbin's method to investigate how strategic

management accounting is used in a multinational company in Germany and found that, in a strategic situation, management accounting is used to facilitate understanding of complexity by presenting information in an accessible form. Broad and Goddard (2010) is one of the latest published accounting studies using Strauss and Corbin's grounded theory to provide insights into the internal performance management of universities in the UK. They found that system is amorphous and decoupled with poor feedback loops, causing a lack of accountability and ownership within the system.

**Table 5-2: Accounting studies using grounded theory**

| Study | Grounded theory approach |
|---|---|
| Covaleski and Dirsmith (1983, 1984, 1986 and 1988) | Glaser and Strauss (1967) |
| Czarniawska-Joerges (1988) | Glaser and Strauss (1967) |
| Czarniawska-Joerges and Jacobsson (1989) | Glaser and Strauss (1967) |
| Slagmulder (1997) | Strauss and Corbin (1990) |
| Baxter and Birkett (1998) | Strauss (1987) |
| Abdul-Rahman and Goddard (1998) | Strauss and Corbin (1990) |
| Abdul-Rahman and Goddard (2002) | Strauss and Corbin (1990, 1998) and Glaser (1978) |
| Greenhalgh (2000) | Orton (1997) |
| Parker (2001, 2002 and 2003) | Strauss and Corbin (1990) |
| Abdul-Rahman and Goddard (2002) | Strauss and Corbin (1990, 1998) and Glaser (1978) |
| Norris (2002) | Strauss and Corbin (1990) |
| Goddard (2004 and 2005) | Strauss and Corbin (1990) |
| Goddard and Assad (2006) | Strauss and Corbin (1990, 1998) |
| Aseeri and Broad (2007) | Strauss and Corbin (1990, 1998) |
| Broad *et al.* (2007) | Strauss and Corbin (1990, 1998) |
| Efferin and Hopper (2007) | Strauss and Corbin (1990, 1998) |
| Tillmann and Goddard (2008) | Strauss and Corbin (1990, 1998) |
| Broad and Goddard (2010) | Strauss and Corbin (1990, 1998) |

## 5.6 Justifications for methodological decision

While there are a number of qualitative methods to choose from, Grounded theory has been found the most appropriate for this study. The topic of Performance Management in Higher Education has received little attention, and as such, demands more in-depth research. More specifically, there is a shortage of an integrated theoretical framework explaining the use of performance measurement systems in a Saudi university setting. Given this lack of literature, the inductive nature of Grounded theory can be

appropriate as it mainly aims to build a theory from the data, rather than testing existing theories.

Grounded theory also provides researchers with a systematic method for collecting, analysing and interpreting the data. For this study, Strauss and Corbin's approach, particularly, provided the researcher with guidelines of issues such as theoretical sampling, coding and categorising procedures and generating the theory, which made the researcher feel more secured when organising the numerous amount of data.

This methodology, however, does not restrict creativity. Strauss and Corbin's Grounded theory allows researchers to employ related theories and empirical experience in theory building. Given the nature of this research, which focused on actions and interactions of people towards performance measurement systems, it was clear that theory such as institutional theory and Hofstede's theory could have explanatory power and could help the researcher to enhance theoretical sensitivity and increase the ability of conceptualisation and interpretation of data. The researcher also was able to reengage with the literature as the data was interpreted and analysed. The analysis enabled the researcher to define and redefine the codes and analysis many times during the analysis in a rigorous and structured manner. More details of data collection and analysis are found in sections 5.6 and 5.7.

Finally, Grounded theory has proven credibility in social sciences, but has not been largely adopted in Accounting. This offered the researcher with an opportunity to use a credible methodology in a different area of research.

## 5.7 Justifications for case selection

The use of performance measurement systems in the university sector in Saudi Arabia has not been explored in the literature. This sector has gone through several stages of change, which might have had an impact on the way performance measures are practiced. Among 20 Saudi public universities, only two universities have been chosen for exploration in this study. The main reason for choosing the two cases is the fact that they both share a number of similarities but they differ significantly.

Both universities share similarities in terms of being under the supervision of a number of central governmental bodies. Firstly, ministry of higher education oversees the two cases administratively through the Supreme Council for Higher Education, which is headed by the king. In addition, the Minister of Higher Education plays the role of Chairman of the university board at both universities. Secondly, the Ministry of Finance has a central role in funding both universities. This ministry imposes the same

administrative and financial requirements. Thirdly, the two cases are asked to comply with the same requirements of the Ministry of Civil Services in terms of recruitment of national cadres. Fourthly, the National Commission for Academic Accreditation and Assessment requires both universities to comply with the same standards for performance evaluation.

However, the social contexts in which the two universities are located are very different. KKU is located in a tribal area of great social restrictions, whereas KFUPM is located in a more open atmosphere that is not very much restricted by tribal constraints. Differences, potentially in organisational culture is also one of the distinguishing factors between the two universities. Unlike the traditional culture of KKU, KFUPM was founded by an American petroleum company and hence is dominated by western culture. Other differences include size and specialisation where KFUPM is a medium sized specialised university, while KKU is a large and multi-disciplinary university.

These similarities and differences have prompted the researcher to select the two universities in order to enrich the comparison with cultural details that could have an impact on the phenomenon under investigation.

Selecting more than two cases would have enabled the researcher to find further differences but this would have been difficult using grounded theory as it seeks depth rather than breadth. Instead of drawing from a large sample of universities, the researcher sought to acquire in-depth information about two cases. Finally, the researcher had contact with several universities in Saudi Arabia but the selected cases were the ones that granted sufficient access.

## 5.8 Data collection process

The research was conducted in two Saudi government universities. The first case was King Khalid University (KKU), which is a multi-disciplinary university. The second case was King Fahd University for Petroleum and Minerals (KFUPM), which is a specialised university. More details about the two universities are provided in chapter 6.

The data collection journey started with providing the general secretary of each university with a formal information sheet describing the overall research objectives and question and general personal information of the research. The overall objectives have been formulated by taking the Strauss and Corbin's approach to grounded theory by immersing oneself into the literature relating to performance management and management accounting within higher education. From that literature review, the

researcher was able to distil the main research topic and that Strauss and Corbin's approach helped to articulate what the overall research objectives were to the general secretaries. After that, the researcher was provided with a formal letter on behalf of the president of the university to be given to other management levels in order to introduce the researcher to interviewees. The letters requested the officials to participate in the study and facilitate the researcher's data collection journey.

Overall, forty-nine interviews were conducted with presidents, vice-presidents, deans, vice-deans, directors and other members at both universities and other interviewees from related agencies who were relevant to research topic. Tables 5-3, 5-4 and 5-5 list interviewees according to their positions. The use of interviews offered a higher degree of confidence in the responses achieved, more so than had questionnaires been used, and, further, involved observation of the non-verbal behaviour of the interviewees (Collis and Hussey, 2003). The interviews allowed the researcher to ask complex questions and obtain detailed insights about personal feelings, perceptions and opinions that might not have been uncovered using other methods.

Out of the forty-nine interviews, thirty were conducted for primary data collection, ten of which were initial contacts, while the twenty were undertaken in accordance with the notion of theoretical saturation[5]. A further nineteen interviews were added for the purpose of the reflection of initial findings. The selection of these interviewees was mainly based on the notion of theoretical sampling[6]. The initial ten interviews were decided on in advance and the interviewees were selected according to their knowledge of the phenomena under investigation. Their knowledge of the phenomena was determined after meeting the general secretaries in each university who were able to name some members of the strategic planning committees. Those committees hold regular meetings in which strategic performance objectives and measures are discussed. After that, the data led the selection of other interviewees for the primary data collection and the sampling was directed by the extent to which participants were relevant in the context and could enhance the development of categories. Therefore,

[5] Theoretical saturation is the point at which all relevant data has been gathered and analysed. This occurs when findings in data repeat themselves and no new information about the emerging categories is produced by the additional data.

[6] Theoretical sampling is one of the core processes of grounded theory, which helps to determine the next source of data based on theoretical purposes. This means that data leads the researcher, which requires that collection and analysis of data be undertaken with the purpose to support the development of the emerging theory. This approach is used to ensure that further data gathering focuses on the emerging categories and theoretical ideas (Strauss and Corbin, 1998).

the researcher followed theoretical purpose and relevance in the sampling process, which means that those theoretically relevant individuals were selected because they added value to the development of emergent categories. This sampling approach offered more confidence in the findings because they were ensured to emerge from data and were constantly and selectively validated with new data. The last nineteen participants were selected according to their relevance and knowledge of the phenomena and were ensured that they came from different hierarchy levels. Those were selected to present the provisional findings to them in order to test the validity of these findings. Those findings were presented to them in a form of a provisional diagram, which summarised the main categories and their provisional links. This provisional diagram is found in appendix 2.

Interviews duration ranges from twenty minutes to ninety minutes, but the average was forty-five minutes. Most interviews were tape-recorded and some interviewees declined to be recorded, as they feared that the recording might be misused. The researcher assured confidentiality to the participants and informed them that their audio tapes are only used for data collection and analysis. All the interviews were conducted in Arabic, and the transcripts were not translated to English, except for the texts that were included in the thesis as quotations.

Interviews can take several styles such as structured, semi-structured and unstructured interviews, a selection of which depends on the research approach and the type of data required. For this research, interviews were initially unstructured but were frame by and focused on the research topic, but as significant issues emerge, semi-structured interviews were then used. The broad reading of the literature helped the researcher to identify the research topic, formulate very general research objectives and questions, and consequently identify a number of initial interview questions to be asked in the initial interviews. The conversations with interviewees was always started with a general conversation about the interviewee position and roles and then would go into another general question about the performance measurement adopted on interviewee's organisational level. Examples of the interview questions are found in appendix 1. The interview would continue depending on the responses, which means that the interview undertook an interviewee-led form. Moreover, with the progress of data collection and analysis, more specific issues were addressed in interviews, which the researcher would mention if not covered during the interview. These specific issues assisted to triangulate the findings and obtain theoretical saturation. Furthermore, the

researcher considered field notes[7], especially when the interviewee did not agree on the tape recording.

**Table 5-3: Interviewees in KKU**

| Position | No. of Interviews |
|---|---|
| President | 1 |
| VP for graduate studies and scientific research | 2 |
| VP for administrative affairs | 1 |
| Dean of college of Dentistry | 1 |
| Dean of college of Applied Medical Sciences | 1 |
| Dean of Arabic Language and Social Sciences | 1 |
| Dean of college of Sharia'a and Islamic Principles | 1 |
| Dean of college of Languages and Translation | 1 |
| Dean of Library Affairs | 1 |
| Dean of Admissions and Registration | 1 |
| Supervisor of college of Pharmacy | 1 |
| Supervisor of college of Engineering | 1 |
| Supervisor of college of Computer Sciences | 1 |
| Supervisor of Centre of E-learning | 1 |
| Supervisor of centre of Academic assessment and development | 2 |
| Secretary of university board | 1 |
| Director of Planning and Budgeting | 1 |
| Director of academic department of Accountancy | 1 |
| Director of Follow-Up Management | 1 |
| Director of Administrative Development and Training | 1 |
| Director of department of Financial Affairs | 1 |
| Director of department of Information and Statistics | 1 |
| Director of press centre and public relations | 1 |
| Financial Auditor | 1 |
| Total | 26 |

[7] Field notes are notes of conversation or observations taken during the conduct of interview especially when the interviewee declines to be tape-recorded.

Table 5-4 Interviewees in KFUPM

| Position | No. of interviews |
|---|---|
| VP for Academic Development and Director of Quality Office | 1 |
| General Supervisor for Financial and Administrative affairs | 1 |
| Dean of Library Affairs | 1 |
| Dean of Admission and Registration | 1 |
| Dean of College of Environmental Design | 1 |
| Dean of Students Affairs | 1 |
| Dean of Scientific Research | 1 |
| GM for Budgeting and Planning | 1 |
| Director of Centre for Programme Assessment | 1 |
| Internal Auditor | 1 |
| Deputy Manager of Quality Office | 1 |
| Deputy manager for Accounting | 1 |
| Director of HR | 1 |
| Chairman of Physics department | 1 |
| Total | 14 |

Table 5-5 Other interviewees:

| Location | Position | No. of interviews |
|---|---|---|
| Ministry of HE | VM for educational affairs | 1 |
| NCAAA | GM of NCAAA | 1 |
| NCAAA | Consultant | 1 |
| General Audit Bureau | Deputy Assistant for Performance Audit | 1 |
| General Audit Bureau | GM for Performance Audit of state-owned enterprises and companies | 1 |
| General Audit Bureau | Assistant GM for Performance Audit of Ministries and Government bodies | 1 |
| Control and Investigation Board | GM of regional branch | 1 |
| Aafaq | General Manager | 1 |
| Aafaq | Deputy Manager | 1 |
| Total | | 9 |

Reviewing documents also provided a useful source of data for the research. The researcher collected all available documents but only those documents related to processes and procedures, accounting and planning, strategic management and

performance measurement were taken into consideration. Most documents were read before interviews took place except a number of documents that were collected during or after the interviews. Annual performance, processes and procedures guidance and strategic plans were examples of these documents. The researcher ended up with a large amount of documents, which are listed in table 5-6. Reviewing the documents contributed to some extant to the coding process and was also used to provide more information during the interviews. Categories emerged from interviews were constantly compared with what was in the document for the purpose of validation.

Table 5-6 Documents reviewed

| Document | Source |
|---|---|
| Processes and Procedures Guidance (staff affairs)<br>Procedure guidance of purchasing processes (Financial auditing)<br>Annual performance reports (1999-2006)<br>University overview and guidance<br>Colleges individual overviews<br>Colleges self-assessment reports | KKU |
| Strategic Plan (2006-2011)<br>Annual performance reports (1981-2007)<br>Colleges individual overviews<br>Key Performance Indicators<br>Undergraduate Bulletin (2006-09)<br>Graduate Bulletin (2006-09)<br>Achieved goals of Quality Office (2007)<br>University Overview<br>Guidelines for self-assessment of undergraduate programmes | KFUPM |
| GAB overview, strategic objectives and bylaws<br>Performance control guidance<br>Guidelines for internal auditing of government agencies and state-owned enterprises | General Auditing Bureau |
| University sector overview<br>Higher Education Council overview and bylaws<br>Future Plan for University Education in Saudi Arabia (Aafaq) | Ministry of Higher Education |
| Annual Programme Report (2007)<br>A number of relevant forms and templates<br>Handbook 1, 2 and 3<br>NCAAA Bylaws | NCAAA |
| Shuraa Overview and Bylaws | Shuraa Council |
| CIB overview and responsibilities | Control and Investigation Board |

## 5.9 Data analysis process

The data was analysed using the set of coding procedures suggested by Strauss and Corbin (1998). This method seeks to generate a theory that relates to the particular situation forming the focus of the study. The analytical process involved the three stages of open, axial, and selective coding. This theory is "grounded" in data obtained during the study, particularly in the actions, interactions and processes of the people involved. The researcher made personal daily visits to two case study sites to collect data. Then the data was analysed between visits, the process continuing until diminishing returns and data saturation were achieved. This approach has proved useful in linking perceptions to actions and in developing a contextualised theory from the data collected (Strauss and Corbin, 1998).

Although documentary data played an important role in the coding processes, interview transcripts were the main source for the analysis. All the interviews, lasting on average 45 minutes and written in Arabic, were transcribed between visits, which was huge amount of work. During the open coding process, the researcher went manually through the transcripts line-by-line and then paragraph-by-paragraph and ended up with approximately 150 open codes, which were reduced by further comparisons between interviews and clustering similar codes into open categories. The interview transcripts were reviewed entirely after the axial and selective coding stages, which involved comparing raw data with the relationships that emerged between categories, as well as with the substantive grounded theory that emerged after the selective coding process. This comparison was meant to test whether the outputs of the analysis were consistent what individual participants really said during the interviews.

During the open coding stage, the researcher identified a set of descriptive codes, from which some codes repeated themselves throughout the interviews and some were not related to the phenomena under investigation. Similar valuable codes were clustered under open categories and other codes were ignored if not supported by similar ones from other interviews. The constant comparative practice was continually used during this stage as well as later analytical stages. Memos[8] were employed throughout the analysis process, which helped in documenting the categories that emerged during the analysis and record their properties and dimensions and any other emerging ideas. During the second stage, axial coding, the data underwent a more

8 Memos are the writing-up of theorising ideas about codes and their relationships. Writing memos is a continues process which overlaps with the processes of data collection and analysis (Corbin and Strauss, 2008).

complex process of abstraction. Subcategories were linked together to form the main categories. The final stage was selective coding, in which a core category emerged and systematically linked with other categories emerged during the axial coding. This process also involved validating the relationships between categories and completing other categories that need further development. This was done during the second phase of data collection when the researcher played back provisional findings to participants. This process also involved describing the substantive grounded theory that emerged after this stage. Chapter 7, 8 and 9 present the outcomes of the open, axial, and selective coding processes.

## 5.10 Considerations of reliability and validity of the research

The trustworthiness of any research depends on the rigour of its process, which is judged on the basis of the criteria of validity and reliability (Morse et al., 2002). It was emphasised by methodologist that researchers need to consider validity and reliability during the entire process of their studies in order to minimise and manage possible threats (Hall and Callery, 2001; Morse et al., 2002). The researcher had to consider whether the findings of this study are in fact the same as what was perceived by interviewees and whether data collected could be relied on.

Although grounded theory procedures do not handle all threats of validity and reliability (Hall and Callery, 2001), many threats can still be managed in a grounded theory study through several methodological tactics (Glaser and Strauss 1967; Strauss and Corbin, 1998). All of these practices are discussed in the following paragraph and have been applied in this study.

Firstly, as suggested by Morse et al., (2002), the researcher ensured that the methodology and methods adopted in the present study are compatible with the research questions and objectives.

Secondly, during the data collection stage, the researcher adopted a number of tactics proposed by methodologists to reduce threats to validity and reliability. As suggested by McKinnon (1988), the researcher spent sufficient time in the research sites to collect the required data in two phases. A total of three months were spent in the research sites during the first phase to gather primary data. The researcher revisited the field in another phase and spent two months in order to gather more data and ask questions regarding the reflectivity of provisional findings. Those five months spent in the field were important to provide the researcher with a deeper understanding of the attitudes

and behaviour of participants. This depth of understanding was useful in terms engaging with participants in an informal and more friendly discussion.

Thirdly, as proposed by McKinnon (1988) and Parker and Roffey (1997), a mixture of methods were used for collecting data (i.e. interviews and documentary reviews). Observation of daily behaviour was sought on particular events during the data collection stage. Categories were supported by observations from incidents that occurred during the interviews for example. One occasion, for instance, upon which the interview with one of the deans was interrupted by the father of a student, who asked the dean, as a favour, to make the exception of accepting his son into accommodation despite having missed the application deadline. The dean refused to treat the student differently, even though the father tried to convince him that he had friends at the university whose applications had been accepted after the deadline. The dean insisted that no one is treated differently and that exceptional cases are made only for students with medical reasons. This observed incidence was used to support the favouritism category.

Fourthly, as suggested by Morse et al. (2002), the research was conducted in two organisations, which share many conditions and circumstances. They both had similar organisational structures, and were subject to the same policies and regulatory laws. Therefore, it was possible to compare and examine emergent categories in one case with that in the other case. This categories comparison across the two universities was useful in terms of testing the relevance and significance of the phenomena to the participants' point of view as well as ensuring that such phenomena were fully captured to the point of saturation.

Fifthly, as suggested by McKinnon (1988) and Hall and Callery (2001), the relationship between the researcher and the participants is crucial to determine the quality of the data collected. The researcher attempted to use his personal relationship with a number of important participants to open the doors for more friendly and informal meetings with other participants. This kind of relationship assisted to build trust with the interviewees since the beginning of the data gathering stage.

All the above strategies were employed during the early stages of the methodology and methods selection and data collection. There are a number of other practices that helped the researcher address the issues of reliability and validity, all of which were employed during the data analysis stage as explained below.

In grounded theory studies, Strauss and Corbin (1998) suggested that date gathering and analysis occur concurrently in order to improve reliability and validity, because this

iterative process would help the analysis to be determined by the data. In the present study, the data collection and coding processes were systematically intertwined from early stages of the research to the formulation of the grounded theory.

One of the important features of grounded theory research that contribute to trustworthiness of its process is the constant comparison method. This feature, involving comparison of events and incidents, helped to generate theoretical explanations and emergent categories (Glaser, 2002). Any emergent categories and new explanations were also constantly validated and compared with other categories in following interviews or documentary analysis, in order to aid the generation of substantive grounded theory (Glaser and Strauss, 1967). Therefore, the constant comparison method was helpful to reduce bias, because every emergent category was constantly validated with raw data (e.g. interview, document or both). This means that emergent phenomena were dealt with as provisional until they are validated with more data gathering and analysis up to the level of saturation. This multiplicity of doubtful views of the phenomena emerged from the data helped to improve the reliability and validity of the findings (Strauss and Corbin, 1998).

The present study follows Strauss and Corbin's (1998) coding procedures, and as such, it involves a systematic splitting and reassembling of the data, which helped to reduce possible subjectivity. The researcher is more subjective during the early stages of dealing with the raw data and labelling them in their fractured situation. Such bias was reduced by moving iteratively from the raw data to the categories (Charmaz, 2000).

After the generation of the substantive grounded theory, further verification was done through constant comparison with the raw data, and by reflecting the emergent findings to the participants (Strauss and Corbin, 1998). This included a constant comparison of the generated core phenomenon with raw data to examine and determine its explanatory ability of the investigated phenomena. The emergent findings were replayed back to the participants during the second phase of date collection. The researcher presented the provisional findings to a number of important participants such as vice-presidents and other people from other managerial levels. A provisional diagram summarising the main categories and their provisional links was provided to the participants in order to simplify the findings to the respondents. Most of the reflective feedback was positive and pointed out that provisional findings captured precisely the phenomena under investigation.

## 5.11 Summary

This chapter has presented Strauss and Corbin's (1998) grounded theory as the research methodology. The research problem was to investigate the use of performance measurement systems in the context of Saudi public universities. The general purpose of the study was to theorise inductively from the data on the phenomenon under investigation. The chapter provided a general overview of the methodology and gave details of the data collection and analysis methods used. Finally, some considerations of the reliability and validity of the research findings were presented. The following chapter presents descriptive details about the two universities.

# CHAPTER 6: DETAILS OF THE UNIVERSITIES

## 6.1 Introduction

The aim of this chapter is to provide a description of the research sites, KKU and KFUPM. KKU is a large multi-discipline university located in the south west of the country, whereas KFUPM is a middle-sized specialised university located on the east coast. This description includes an overview of the history of the universities, their location, number of colleges and centres and, finally, their organisation and administration. An overview of Saudi higher education is provided in Chapter 2 and is relevant to the case studies. Hence, this chapter avoids some information already described above in the previous chapter.

## 6.2 King Khalid University (KKU)

### 6.2.1 University background

KKU was founded in 1999 (see table 2.1), when two branches of two older universities merged. This merger created KKU with multiple colleges and specialisations. The university is located in the city of Abha, considered one of the most beautiful cities in the Kingdom. The city is surrounded by mountains, fertile plains and valleys. It has a moderate climate, heavy rainfall and is encircled by dense forest. Therefore, the city is frequented by tourists every summer, while the university itself is deemed an attractive and comfortable environment within which to work by researchers and students alike. The university has a great influence on local society and, further, plays a role in other areas in which it operates colleges (Higher Education in Saudi Arabia, 2008).

The academic year is divided into two semesters and runs from August until May. The university opens its doors during the summer term both to its own students and to those from outside the university. Until 2000, postgraduate programmes were still not available but are now offered by a few colleges, including the college of Education, the college of Shari'aa and the college of Arts. KKU is considered a newcomer, when compared to other universities, to both postgraduate studies and research. In 2002, the number of undergraduate and postgraduate students totalled 13,055, while the teacher/student ratio was 1:29 (Al-hamid, 2002).

**Colleges and centres**

KKU consists of several colleges, such as:

- College of Shari'aa and Islamic Foundations,
- College of Arts
- College of Administrative and Financial Sciences,
- College of Education,
- College of Medicine,
- College Sciences,
- College of Computer Sciences,
- College of Engineering,
- College of Dentistry,
- College of Pharmacology,
- College of Applied Medical Sciences,
- College of Nursing,
- College of Languages and Translation,
- 4 Community Colleges in different cities

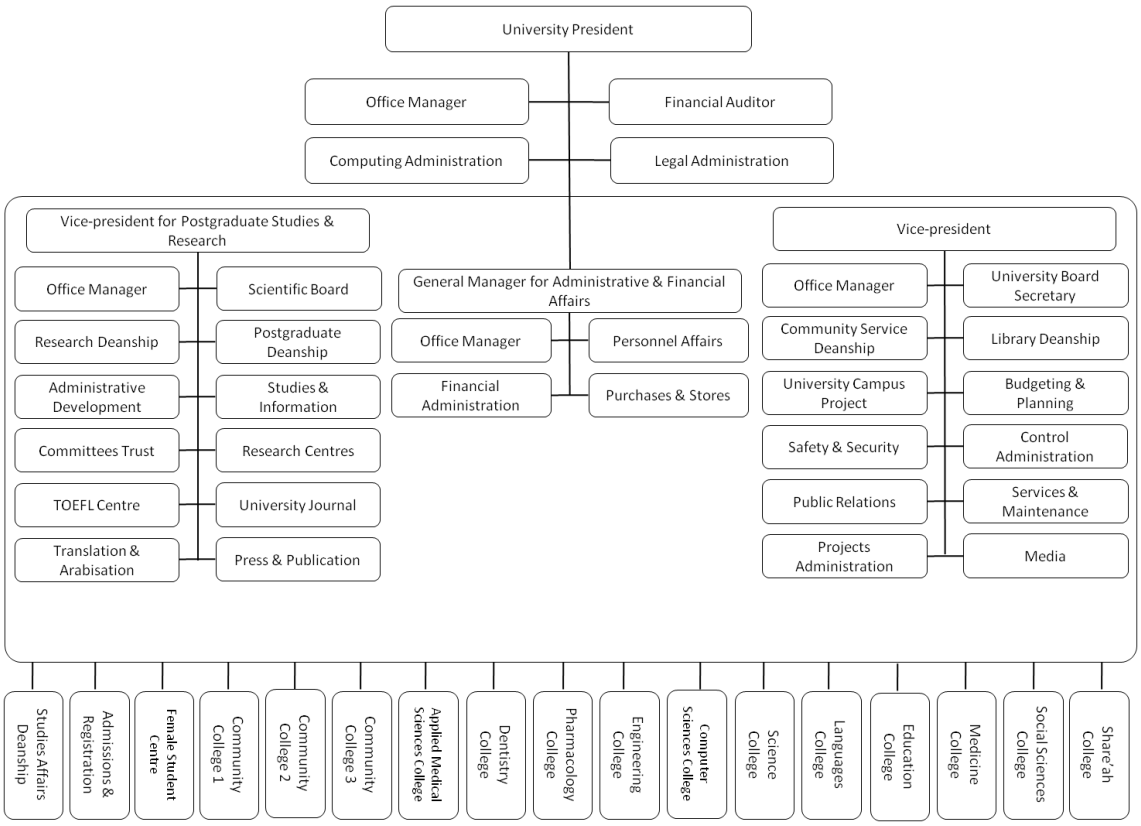
It also has six research centres and three academic associations, as follows:

- Centre for Environmental and Tourism Studies
- Centre for social studies and research
- Research centre at the college of Shari'aa and Islamic foundations
- Research centre at the college of Arabic, social and administrative sciences
- Research centre at the college of science
- Research centre at the college of medicine
- Saudi Association of medical education
- Saudi Association physical sciences
- Saudi Association statistical sciences

### 6.2.2 Organisational structure

As with any other university in the Kingdom, KKU is run by a president, a vice president and an additional vice president for postgraduate studies and research. There are also many supporting deanships, including one for teaching affairs and another for scientific research (see figure 6-1).

**Figure 6-1: KKU organisational structure**




*Source: Ministry of Higher Education, 2003*

### 6.2.3 Strategy

KKU is among those public universities in Saudi Arabia that strive constantly to enhance quality of teaching, research, public service and economic development. The university has published its vision, mission and general objective as follows:

**Vision**

Seeking a leading role regionally and globally, and excellence of knowledge and research, and contributing to more effective and competitive society.

**Mission**

To provide an academic environment for high quality education and innovative research, provide constructive services to the community, and employ optimal techniques for knowledge.

**Strategic objectives**

1. To achieve the aspirations of Saudi Arabia in the development of constructive knowledge that contributes to the support of religious and national objectives.
2. To achieve a high standard of knowledge, research and services for the university
3. To achieve total quality standards and gain accreditation for programmes and institutions in accordance with the standards adopted locally and globally.
4. To create an academic environment suitable for attracting outstanding faculty members in order to develop their knowledge and professional skills.
5. To improve and deploy technology and gain access to the knowledge society.
6. To achieve balanced outputs of the university in accordance with the needs of the labour market.
7. To provide a creative learning environment for students and support communication with alumni.
8. To build an academic communication between the university and other regional and global research centres.

## 6.3 King Fahd University for Petroleum and Minerals (KFUPM)

### 6.3.1 University Background

KFUPM was officially established in 1963 as a College of Petroleum and Minerals (see table 2.1). In 1987, the college became a University for Petroleum and Minerals. The university plays a major role in the Saudi oil industry by providing highly-skilled engineers for both local and international oil companies. In addition, the university has developed further in order to continue making technological advancements in the oil industry. The university is located in Dhahran, between SAUDI ARAMCO and the Dhahran air base, while the campus is situated near the Arabian Gulf at a distance of about seven kilometres from the town of Al-Khobar (Higher Education in Saudi Arabia, 2008). The climate during the months of June through to September is usually extremely hot and humid.

One of KFUPM's fundamental policies is that it is not intended to be a mass educational institution; rather, its purpose is to serve precise professional needs. The university periodically undertakes an evaluation of its programmes, such as the accreditation procedures of the Accreditation Board for Engineering and Technology (ABET). Similar

types of accreditation procedures are implemented for the other academic specialities (KFUPM, 2009).

**Colleges and centres**

The university has several colleges, which are:

- College of Science
- College of Engineering Sciences
- Community College
- College of Computer Science and Engineering
- College of Industrial Management
- College of Environmental Design
- College of Applied and Supporting Studies

All colleges offer undergraduate and postgraduate programmes
in Science, Engineering, Computer Sciences, Industrial Management and Design. (KFUPM, 2011).

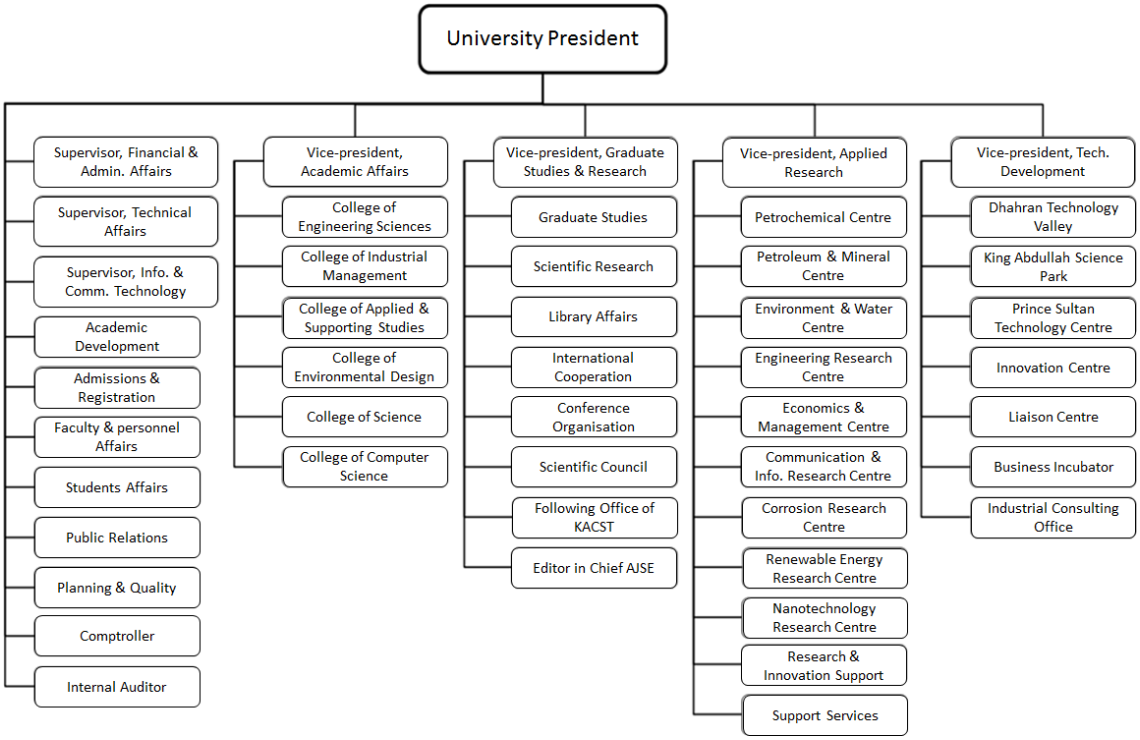
It also has several research centres, as follows:

- The Research Institute centres
- Professorship Programme
- University Academic Associations
- Research Centres at colleges

### 6.3.2 Organisational structure

KFUPM is led by a president, vice president for Graduate Studies and Scientific Research, vice president for Academic Affairs, vice president for Applied Research, vice president for Technology Development and Industrial Relations, supervisor for Technical Services, supervisor for Financial and Administrative Affairs and supervisor for Information and Communication Technologies. In addition to the president, vice presidents and supervisors, university governance includes several bodies: the university board, a cabinet of deans and other academic officers, directors and department chairs (see figure 6-2).

**Figure 6-2: KFUPM organisational structure**




*Source: Ministry of Higher Education, 2003*

### 6.3.3 Strategy

The published vision, mission and general objectives of KFUPM are as follows:

**Vision**

To be a vibrant multicultural university of international repute focused on quality education and innovative research that prepares professionals and entrepreneurs to lead in social, economic and technical development in the region.

**Mission**

The university is an institution of higher learning committed to:

a. Preparing professionals empowered with the knowledge, skills, values and confidence to take a leadership role in the development of the Kingdom in the fields of science, engineering, environmental design and business.
b. Producing research that contributes to the knowledge and sustainable development of the Kingdom and region by providing innovative solutions to identified economic and technical problems and opportunities.
c. Providing a stimulating campus environment for the welfare of its students,

faculty and staff, and offering outstanding professional services and out-reach programmes to society at large.

**Strategic objectives**

KFUPM has several goals that it aims to achieve. These are to:

1. Produce graduates who are noted for their academic excellence, values, entrepreneurial skills and attractiveness to employers.
2. Increase the graduate population, both national and international.
3. Produce productive and innovative research with a renewed focus on national needs and international trends.
4. Institute effective and efficient research policies, procedures and organisation.
5. Further improve KFUPM'S standing and reputation both nationally and internationally.
6. Strengthen the university's competitive edge to improve the response to emerging challenges.
7. Become more proactive and responsive in providing services that are of value to society.
8. Develop a stimulating campus life that promotes growth of human potential (KFUPM, 2011).

## 6.4 Summary

This chapter has provided a description of the two research sites. This included background to the two universities, their organisational structures and strategies. The following three chapters present details of the three staged grounded theory analysis (open coding, axial coding and selective coding).

# CHAPTER 7: **OPEN CODING**

## 7.1 Introduction

As mentioned in chapter 1, this research examines the concept of performance measurement systems in two universities in Saudi Arabia. Its objectives are: 1) to acquire empirical knowledge of performance measurement systems in the studied Saudi universities, 2) to understand the relationship between performance measurement systems and contextual factors, 3) to develop a theoretical understanding of these phenomena, and 4) to suggest practical improvements to performance measurement systems in the two Saudi universities.

The research uses grounded theory approach to identify the theory that best explains the experience of performance measurement system use in the Saudi universities studied. This aim can be divided into the following questions:

1) What is the perceived role of performance measurement systems in the two Saudi universities? How are they used?
2) What factors appear to affect the way in which performance measurement systems are practised?
3) What differences in these phenomena exist between different cases and why?
4) What further developments might be useful?

Open coding is the beginning stage of the grounded theory analysis and the output is a list of categories, which describe the emergent theoretical perspectives. The following important issues relating to emerging data will be discussed in this chapter: understanding the nature of performance measurement, factors enabling or limiting the use of PMSs and the role of accounting systems in performance measurement. The results of initial reflections will also be set out. These emergent research themes provide the grounds and foundation for further research procedures and are substantive realities derived from the data in creative emergent terms, which are not fixed and not restricted but open to subsequent redefinition (Schatzman and Strauss, 1973).

Within these emergent research themes, the stage of open coding was performed to engender the initial concepts and, further, to sustain future sorting. The open coding stage is intended to “open up” the emergent research data themes so that more precise processes can be designed for an organisation . Graduating open categories into emergent theory elements depends upon their theoretical densities. During this

phase, the researcher must also consider preliminary linkages between categories to make easier the final stages of categorisation.

## 7.2 Emergent research themes

The emerging data was organised in themes around issues that are important to the participants. This is how the emergent research themes were created, in order that they could become an establishment for broader research work and also a tool to measure the uncertainties that hindered the research.

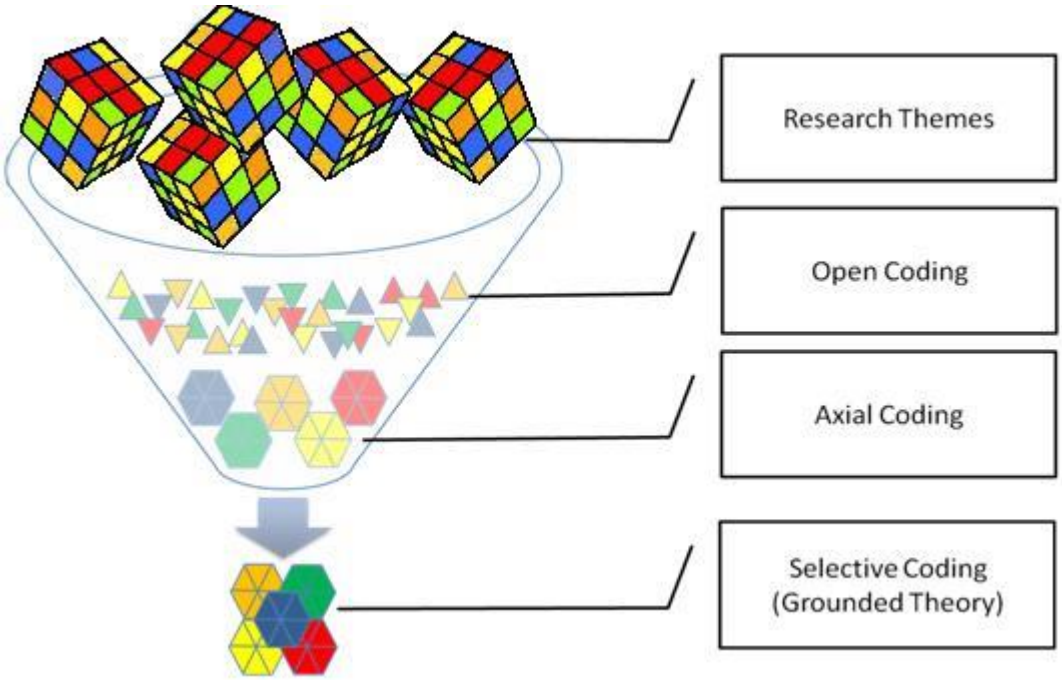
The emergent research themes in this chapter were focused more on the descriptive than the conceptual (Strauss and Corbin, 1990) because the latter increases with the progress of grounded theory analysis. These themes formed the basis that guided the research, which kept recurring again and again through the coding processes of open, axial and selective coding. Key research themes included:

- Perceptions, understandings and status of PMSs
- Perceptions on the factors enabling the use of PMSs
- Perceptions on the factors limiting the use of PMSs
- Perceptions on the role of accounting systems in PMSs

## 7.3 From emergent research themes to development of categories

Emergent research themes do not simply form a broad display of the data researched but also involve the breakdown of data, linking it from concepts and events to the creation of categories that are processed in the open coding procedure. The tasks processed during axial and selective coding are the extended integration of the categories. Figure 7-1 demonstrates this development in selective coding from the emergent research themes to integrated categories.

**Figure 7-1: Analysis process**




Emergent research themes are the boundaries that are created during collection of data. Open coding then helps the researcher to break them into smaller subdivisions. Axial coding and selective coding involves reorganising the data and gathering the categories with their emergent theoretical relationships. Open coding in phase one was undertaken using written data and verbal, physical and historical events to form categories by linking and labelling the concepts. The categories generated during open coding were linked with axial coding and selective coding to form a substantive grounded theory. As Strauss and Corbin (1990) state, axial coding and selective coding are very similar but the latter is performed at a higher level of abstraction.

## 7.4 Open categories

1. Participants' perceptions of performance measurement
2. Uncertainty
3. Human resources
4. Infrastructure
5. Social context
6. Organisational culture
7. Centralisation
8. Favouritism (Wastah)
9. Strategic planning
10. Documentation of policy and procedures

11. Leadership style
12. Attributes of universities
13. Relationship with government
14. Relationship with other stakeholders
15. Financial accounting
16. Budgetary system
17. Cost accounting
18. Performance measurement

### 7.4.1 Participants' perceptions of performance measurement

Participants' perceptions of performance measurement was a category observed from two aspects: understanding of performance measurement and the perceived use and role of the measurement system within the university.

Generally, the meanings associated with the concept of performance measurement in KKU were not broad or comprehensive. The majority of participants associated performance measurement with the issue of individual performance evaluation and did not show sufficient knowledge on how performance measures may be used at strategic and organisational levels.

*"Well, errrrr, as I understand that, measuring performance is to measure the performance of your employee through a specific mechanism and then see if he did well, so you reward him and if not you punish him."* (Dean, KKU)

As this extract shows, many interviewees did not show sufficient knowledge of the purpose of performance measurement. When asked about the method of measuring organisational performance, a number of other participants claimed that only individual performance is evaluated within the university. Others mentioned the annual reporting of activities, which contains general and basic numerical information. This information includes simple frequency tables and graphs, such as numbers of new students, graduates, staff and faculty members, non-curricular activities, research projects, book collections and services to the community. These numbers are not reported against certain targets that had been set previously.

*"I do not know exactly how our performance is measured but let me tell you what I know. There is an annual report required from each college at the end of each year. We put all activities of the college in this report and this may be one of the mechanisms to measure the performance of our college ... We do not have any budget so there are no measures for financial performance ... the performance of students is measured via*

*examinations. I personally evaluate the performance of faculty members by sending an assessment form to the students, who evaluate the professor's performance according to certain points for things such as use of teaching aids, clarity of language and fairness in dealing with students and so on. These points are measured by the students and are combined with my evaluation that I do, which can give an overall picture of the professor's performance."* (Dean, KKU)

One of the vice-presidents of the university also mentioned the annual report as a means to provide a general picture of the colleges and their overall performance.

*"The annual report of each college is sent to the university board and they are all combined to make the university report, which is sent to the Council of Higher Education ... This report I think is supposed to reflect the reality of our university in front of the decision-makers"* (Vice-president, KKU)

Other participants mentioned government initiatives, such as that introduced by the National Commission of Academic Assessment and Accreditation for measuring organisational and programme performance. They considered this initiative very important for providing a clearer picture of the university's performance. Many deans and directors could not give specific details relating to this initiative and pointed out that, because of workload, they had little time to study its minutiae.

*"The National Commission of Academic Assessment and Accreditation has introduced what is called a self-assessment mechanism; it is a kind of questionnaire to assess the college as a whole and departments within the college, and also to assess the programmes... Frankly, I did not go into it deeply as is required so I can't give you details - not because it is new but the pressure of workload made me a little bit far from understanding it fully, so I gave it to the departments to discuss. We all agreed that it is a great idea but we need to understand it better through training courses and workshops. Unfortunately it was introduced at the wrong time, we are in the summer term and most faculty members are on holiday, which hinders the work significantly."* (Dean, KKU)

Conversely, in KFUPM, most participants had good understanding of the concept of performance measurement. They mentioned that the university provided training sessions to raise awareness amongst the staff of new initiatives, such as performance measurement.

*"We have a strategic plan for the university, started in 2006, and we have a number of performance indicators through which we can measure our institutional and individual*

*performance. The university provided us with some training courses and workshops to understand these new tools but actually we nowadays have too many initiatives, which makes you a little bit confused and lost."* (Dean, KFUPM)

KFUPM has set a number of key performance indicators to measure the outcomes implied by the strategic plan. These indicators are specified to measure the objectives of several key processes, such as teaching and learning, research, community services and other general objectives. In total, 17 indicators have been quantified and summarised in a simple statistical way. The achievement of annual key performance indicators is reported to both the university board and the international advisory board, as well as being included in the university annual report. The latter was mentioned in KKU but contains less detail, is more abstract and is presented to the Council of Higher Education, the Ministers Council and the Consultative (Shura) Council.

### 7.4.2 Uncertainty

Participants' perceptions of uncertainty was another category observed from two aspects: external uncertainty and internal uncertainty.

In both universities, the issue of external uncertainty was mentioned as a main obstacle to planning. Interviewees pointed out that political and economic instability are the main sources of external uncertainty. Frequent political threats had an impact on the oil industry, which accounts for a large share of total Saudi earnings, and therefore, the country's budgetary system was subject to continual fluctuation due to the movement of oil prices.

*"Everyone is in fact obsessed with uncertainty. The political conditions that we experience in the region and their impact on the economic side of the state, as well as solely relying on Saudi oil as a source of income, are the main concern of the state."* (Vice-president, KKU)

*"No, we do not know what will be allocated to us in the coming years because we do not know whether oil prices will increase or come down, and this applies to all governmental sectors. No one can be sufficiently certain to set a plan for ten years, except on paper but not in reality. Our university is dependent on the governmental budget and a lot of projects that we discuss with the Ministry can be delayed or even rejected because of the limitations on financial sources."* (Director, KKU)

*"Well, I think we are not the only organisation that is concerned with uncertainty, it is the concern of the entire state. It is no secret to you that we are relying almost entirely on oil production for funding the state budget and this, of course, puts huge pressure on the state, especially in the light of the security disturbances that we experience in the Middle East that will have an obvious impact on oil prices."* (Vice-president, KFUPM)

The issue of internal uncertainty was mentioned in KKU more frequently than by KFUPM participants. Many interviewees stated that internal uncertainty is derived mainly from the fact that the university board can be, at any time, faced with unpredictable decisions from higher authorities. As stated by many interviewees, such decisions can cause serious disruption to pre-determined plans. Examples include state interference in admissions, with the government forcing universities to accept more than the pre-determined number of applications.

*"One important issue is that our environment is not stable enough and I remember one example with regard to acceptance of students. We in the College Board usually agree on a certain number of students as the maximum we can accept. What usually happen is that when we determine the number of applicants, we surprisingly find that the university exceeds this number, although we do not have the capabilities to teach this number due to lack of teaching staff, equipment and rooms. So the university increases the number of admissions without our approval, which I think it may be the result of social or political pressure, and this, of course, is reflected in our performance. The most important issue for politicians when imposing a certain number of admissions is to absorb the political pressures coming from society and the complaints sent to them from everywhere."* (Dean, KKU)

Another participant mentioned another example of such unpredictable decisions, saying:

*"At the college level I think we are okay but at the university level we sometimes come across some quick and unplanned decisions that we did not prepare for properly. I remember the decision of merging the Teachers' and Girls Colleges to the universities as one example. Although I personally support this decision, because these colleges had to be to be under the umbrella of the universities, but I should say that these quick decisions can disturb us and may affect our performance."* (Dean, KKU)

Other participants raised another source of internal uncertainty, which is the lack of accurate information on the number of applicants. They indicated that lack of precise statistics regarding the increase in population, as well as the issue of migration from

villages and the countryside to major cities, is a major concern for all Saudi universities.

### 7.4.3 Human resources

In terms of human resources, almost all interviewees in KKU agreed that there is a shortage of both administrative and academic staff. One reason for this shortage is the difficulty in recruiting faculty members because most come from other countries, with the university facing significant competition to attract good lecturers and professors.

*"The limited number of faculty members, for example, is a major problem we face. Most of these faculty members are recruited from other countries and, as you may know, the recruiting process is not that easy and smooth, especially if there is more competition from other universities."* (Dean, KKU)

Other participants in KKU indicated that the university does not have sufficient people to perform its administrative business, due to the complex and centralised recruiting process.

*"Here in our college, we have only five administrative staff and we have five academic departments; each department needs to have a secretary who is fluent in Arabic and English but we only have one secretary who cannot cover all departments. Also, any dean needs to have vice-deans, so that each vice-dean can perform his roles either in academic affairs or administrative affairs, while the Dean can supervise and manage the college from a strategic perspective. In return, I am here alone to hold many responsibilities and engage in operational and day-to-day issues, rather engaging in strategic planning."* (Dean, KKU)

Concern over quality of staff in KKU is another issue revealed by participants. Many interviewees complained of the quality of employees and showed concern that they do not reach the standards needed to perform their jobs.

*"One possible pressure that we face is that we do not find qualified national cadres to help us in our daily work. For example, the English skills of our staff are very weak and therefore they do not have access to or communicate with the advanced technology that we provide to them. Therefore, they are dealing with technology that is much higher than their abilities, although they are all university graduates".* (Dean, KKU)

Participants in KFUPM mentioned that human recourses presents one of the obstacles facing the university. Most participants indicated that the issue lay in the fact that the

university has no control over the recruitment process for administrative staff. They all mentioned that the University should have the same responsibility for recruiting administrators as given to them for recruitment of faculty members. Some interviewees said that the university tries to avoid government restrictions in this issue by employing non-Saudi staff but, in doing so, they often face significant resistance from controlling government ministries, such as the Ministry of Civil Service and the Ministry of Finance.

*"It is true that we are a governmental organisation but this does not prevent us from having different standards in the appointment or selection of our employees. When we want to choose a faculty member, we apply standards that may not apply at other universities, and we have several selection committees; all the committees set certain criteria that a person must fulfil. However, when we come to the administrative staff, the Ministry of Civil Services says that employment must be done their way. To be honest, we are targeted by the Ministry of Civil Services because we have a large group of non-Saudi employees and the Ministry tries to put pressure on us to get rid of them and replace them with Saudi staff. We have some standards that it is difficult to find in a Saudi employee, because Saudi employees usually do not master foreign languages and cannot deal with advanced technology, so we set a strong criteria for selection and the Ministry of Civil Services does not like this."* (Supervisor, KFUPM)

*"The university is complaining about the problem of availability of qualified staff. Here in the deanship of library, for example, we need to have staff who have at least a Bachelor degree and with a specialisation in libraries. When we look for qualified staff, we try to recruit non-Saudi people for they are more experienced; also, their recruitment process is much more flexible than that for Saudi staff. But we face another problem in that the Ministry of Civil Services limits us and demands to employ Saudis only. Employment of Saudis has its problems and limitations as well, because they may not be well qualified as well as the fact that the method for their employment is very complex. It requires the approval of the Ministry of Finance and you know that the Ministry of Finance is one of the most complex and least flexible ministries in its policy and procedures. A Saudi employee is employed by the university but, in reality, other controlling ministries control his or her employment affairs. For example, the university has no control over reward and promoting the employee or even punishing or firing him; all of this must be done through the Ministry of Finance and the Ministry of Civil Services."* (Dean, KFUPM)

### 7.4.4 Infrastructure

Regarding buildings and facilities, most participants in KKU claimed that this issue presents another obstacle, as not all buildings are owned by the university and some do not reach the quality required.

*"Unfortunately, the element of infrastructure is against us ... In order to have a good graduate we must spend a great deal on good buildings and facilities. If you compare our university with other institutions, you will find a huge difference in terms of infrastructure, as our university does not own any buildings; all buildings are rented."* (Auditor, KKU)

Other interviewees in KKU showed their dissatisfaction with frequent faults in technology and slow network speeds.

*"For example, breakdown of the network is one of the most important problems that we face almost every day and, therefore, if we want to move from one phase to another we must be solve such a fundamental problem. We were previously using paper-based means to manage our affairs; we then moved to the electronic network, which unfortunately, is very slow and is down most of the time. Researchers and students, whenever they want a piece of information or a particular reference, waste time due to the frequent computer and network downtimes."* (Dean, KKU)

However, most participants in KFUPM agreed that the university has a good and satisfactory infrastructure, including the fact that the university has its own campus delivering all necessary services, equipments and facilities.

### 7.4.5 Social context

Many participants agreed that KKU is located within a society controlled to a large extent by traditional and tribal customs and norms . They indicated that these norms might have a significant impact on the daily life of individuals, including staff members at the university. The relationship of a person to his tribe might affect performance and behaviour within the university.

*"Yes, as you know here the region is made up of tribes and the culture of the tribe and tribal interests are considered important. You know how much pressure is put on the dean from members of his tribe or his extended family to do certain things that may not be serving the university as a whole."* (Dean, KKU)

Another participant added that misuse of power emanating from tribal culture might be a key reason for the withdrawal of powers from the deans and directors.

*"Perhaps being in a tribal area is one of the reasons for not delegating authority to the deans and directors. It is clear that the president is concerned with the misuse of authority and tolerance. For instance, a dean may misuse his power by taking a decision to serve a member of his tribe at the expense of the overall university interest. But I think this concern should not exist if things are clear and managed systematically."* (Dean, KKU)

Another interviewee said that he is not put under this pressure because he is from outside the area in which the university is located:

*"Thank God, I am safe from these things because I am outsider and no one will try to put pressure on me to do things that I do not want, and you usually see my vices withdraw from confronting their society and preferring to get me in the front because they know that, because I am not committed to any blood or tribal relationships, I will do my job according to the rules... I really appreciate the pressure facing my colleagues, especially in issues of admission and registration, because people have the misconception that since I am the dean I should have control of everything. Although I am not from the region, I usually face some pressure from my neighbours to accept their children. Yesterday, for example, one of the neighbours contacted my wife in order to ask me to change the result of her son, who failed in physics."* (Dean, KKU)

Another participant mentioned that being part of a tribal society could affect employee performance due to the frequency of social events and commitments; the person in charge should consider this when dealing with the employees.

*"Tribalism undoubtedly has a role in the society but at least I have not seen or noticed it in the university. You might call it favouritism because you do a favour to someone for the sake of courtesy. But because I do not have much power and influence I cannot do something big. I will give you an example, an employee wants to get vacation leave and he repeatedly asks me and says that he needs it for his family or his wife; I eventually do him a favour and give him what he wants. Social relations in the region here play a significant role; we see too many marriages and social events taking place and if I do not give the employee a vacation he will come to work late or sleepy and will not perform well because of these events or social excuses. Therefore it is better to give him what he wants because his absence is better than his presence."* (Dean, KKU)

Another manager agreed with this sentiment, saying;

*"I sometimes read in the newspapers or hear from the society that favouritism is a phenomenon that exists in some organisations and this, in my opinion is a natural thing - that you sympathise with your tribe and your family - but I also think that it should not exceed the limits. There should be a red line to limit the sympathy and assistance to those who you care about. From a management perspective, I think I should understand the social and cultural issues that are specific to the region and that I should be more responsible and realistic and adapt to the reality and the society in which we operate."* (Director, KKU)

One of the participants pointed out that change should be imposed by the top management in a tribal context:

*"We are different tribes and each with a different opinion and interests. I believe the decision should come from the top and be implemented without any discussion and therefore you will find that people have no choice but to change and that their culture is changed too."* (Dean, KKU)

On the other hand, KFUPM is located in an area in which industrial companies operate, since the country's main oil and gas fields are largely located there. Society is therefore more open and tribal norms are not dominant. It can be described as a multicultural society, where many people come from other countries and from other cities within the Kingdom.

*"The area here is very comfortable for my family and me as I have the time to focus more on them and on my job. Unlike living in my hometown, where social obligations have a large impact on my comfort and my business, I am committed only to my friends and some of my neighbours; we gather every weekend and go to the beach or travel to Bahrain, and this gives me a great motivation for productivity in my job."* (Director, KFUPM)

Another interviewee expressed his comfort in the area, describing it as both multicultural and diverse by saying:

*"The beauty of our work here is that I do not miss the atmosphere of diversity, which I get used to when I was studying in America for my doctorate degree. You can see many cultures in the street, where you usually see people from Western and Eastern countries, and you can easily find international food such as Chinese, Indian, Italian and many others."* (Dean, KFUPM)

### 7.4.6 Organisational culture

Participants' perception of organisational culture was a category observed from two aspects: roots of organisational culture and internal atmosphere.

In terms of the organisational roots of KKU, all participants agreed that the university was built upon two distinct branches of two different universities, each with its own organisational culture. Most interviewees said that, although the university took a long time to complete the merger, they still feel the difference between the two cultures.

*"The university spent significant time in the integration of the university but you know that the integration of two different cultures is one of the hardest things that can be done. We are suffering a lot from some colleges whose lecturers and staff cannot deal with computers or do not know English, especially since the university is trying to involve them in any process of change. Whereas we see the opposite in some other colleges, such as the scientific colleges, as most of their staff have a good understanding and are good at dealing with technology and take the initiative in applying change."* (Vice-president, KKU)

Another interviewee mentioned the efforts made by the university management to standardise academic and management issues and to create a united organisational culture.

*"At the academic and administrative levels, we tried to implement the same criteria for all colleges in issues such as teaching, examination, registration and admissions, and management issues. Therefore, the president of the university and his team are trying to smelt the cultural variations that came from the two old branches and create a unique culture for our university."* (Dean, KKU)

On the other hand, KFUPM was established from the outset as a single institution based on a cultural background that is distinct from the local culture known in other universities. One interviewee summarised what all interviewees agreed upon by saying;

*"I believe that the university was built on a solid basis, as it was established based on the American system and what you see now was set up by the Saudi ARAMCO and the American people working in the oil industry. I think that Western culture, especially the American way of management, is characterised by professionalism, simplicity and decentralisation. So those people brought the American way of management, teaching methods, curricula and other issues like the language."* (Vice-president, KFUPM)

All interviewees agreed that the university's unique culture is the reason behind its position of excellence amongst other Saudi public universities.

In terms of the internal atmosphere in KKU, many interviewees were dissatisfied with the fact that some employees lack positive attitudes and motivation towards their jobs.

*"There is also another obstacle, that is the spread of a culture of apathy and inaction, lack of productivity and lack of a sense of responsibility; all of these things are very important to consider if we want to change."* (Director, KKU)

Culture of quality and measurement is another issue covered by a number of interviewees, who considered that the lack of such a culture in the university is an obstacle to change.

*"Concepts of measurement and quality are among the things that do not exist in many universities in Saudi Arabia, including our university, and we really need to promote this culture if we want to progress".* (Dean, KKU)

Another issue that most interviewees complained about is the issue of change resistance and the fact that this attitude is more notable among Saudi faculty members and staff.

*"Resistance usually come from Saudi faculty members. I luckily do not have many Saudis in the College and therefore you find our work usually goes smoothly... I previously worked in the College of Medicine, in which there are about 45 Saudi faculty members. I noticed that some of them had a strong self-esteem and they believed that they always had the right opinion. They believe that they do not need to be assessed because they graduated from the best universities in Britain and Canada. Others believe that such change initiatives would conflict with their self-interests and plans. On the other hand, non-Saudis have no option but to obey the decisions: even if they are not 100% convinced, they fear that resistance would affect the renewal of their contracts."* (Dean, KKU)

Another interviewee agreed with this issue, saying;

*"We suffer a lot from people resisting any change idea and this resistance is much clearer among Saudi faculty members. Many Saudi lecturers do not like to be assessed by their students because they feel they are being insulted by this. Student assessment*

*does not necessarily reflect a full picture of the lecturer's performance but at least it is one among other indicators."* (Dean, KKU)

Another interviewee supported the suggestion that non-Saudi faculty members fear the loss of their jobs if they disagree or resist decisions, whereas Saudis are more confident in terms of job security.

*"Non-Saudi professors and lecturers are usually cooperative in everything in the teaching and non-teaching tasks. You know that the faculty member is required to work 35 hours per week, ranging from teaching, research and administrative work, and Saudis usually do not commit to them because they know very well that you cannot expel them, while non-Saudis may fear that their contracts will not to be renewed."* (Dean, KKU)

Another interviewee pointed out that change resistance is clearer in the academic environment.

*"I think change resistance is something general and natural in all organisations but I also believe that the phenomenon is stronger and clearer in the academic environment."* (Dean, KKU)

Other participants brought up the issue of injustice in the method of dealing with staff members who have performed better than others.

*"The problem is that we do not distinguish between the normal lecturer and another with outstanding performance, as both are treated equally."* (Dean, KKU)

He also indicated the issue of lack of cooperation between faculty members and their negative attitudes towards teamwork:

*"We also suffer from what I can call professional jealousy among faculty members: some professors and lecturers do not want to see others exceed them. One example is when someone has a research idea or a proposal, he does not want others to know what he is doing and he tries hard to hide his work from his colleagues and works on his own. This is, in my opinion, a major obstacle to the development of our university and only when we can get rid of this negative culture can we change."* (Dean, KKU)

It was also observed during the collection of data that many interviewees did not hold diaries to manage their times and appointments. Most of the time, interviews took place immediately after the first meeting with the interviewee without the need to

make an appointment, while one interviewee fixed an appointment time with the researcher on three occasions but did not manage to make any of them. In addition, one of the interviewees gave the researcher almost half of his working day to talk about the research topic and was complaining for most of that time about the negative aspects of his daily job. Prior to the interview, the interviewee invited the researcher to have a heavy breakfast with all the employees in the office, which surprised the researcher since, from the researcher's experience, having food in the office during work time is in fact against the law.

On the other hand, life on campus at KFUPM was more organised and comfortable and the researcher did not observe or hear complaints as frequently as during his time at KKU. Most interviewees were satisfied with the internal atmosphere of the university and the relationships between its staff members. Unlike KKU, almost all interviews in KFUPM took place through arranging a suitable time with the interviewee or his secretary. One of the participants mentioned that this organisational culture has been maintained through generations and described its influence on daily life in campus by saying:

"*The university has a strong culture that we are used to and is passed along from generation to generation. This culture has affected everything, even the most basic things like the attendance of staff, even though we do not have any mechanism to control attendance but when you come at 7.30 in the morning you will find that about 95% of the staff are at their desks. This behaviour remained as part of the culture, which is very difficult to change*" (General Manager, KFUPM)

One interviewee stated that staff members feel that fairness and justice is present in the university's organisation:

*"Our style of management is very transparent so that all the rights and duties of the employee, student and faculty member are fully disclosed. For example, the employee can have access to all rights, including access to his performance evaluation that is prepared by his manager as well as discussing it with him, and we have a clear law for promotions and bonuses that is applied to everyone without discrimination."* (Dean, KFUPM)

Another participant mentioned the democratic atmosphere that all staff and students enjoy in the university:

*"Everyone here speaks loudly, even students can meet the president in an annual forum to discuss any issue that they feel dissatisfied about, like the curriculum or*

*accommodation and so on. He also meets with faculty members and staff at the beginning of each year to discuss issues of their interest. We have an open culture that we do not find in other universities."* (Dean, KFUPM)

### 7.4.7 Centralisation

Participants' perception of centralisation was a category observed from two aspects: financial centralisation and administrative centralisation.

In terms of financial centralisation, most interviewees pointed out that programmes and projects are financed from the central budget, which lacks flexibility and is limited. They claimed that limitation and inflexibility of the budget is something that all government sectors suffer from. One interviewee described this limitation by saying:

*"The university campuses project was presented to the engineering offices worldwide through an international competition and international arbitrators selected the best offer. The offers say that the project is going to cost no less than SR 8 billion but we found that the Ministry of Finance offered us only 3 billion, so how can we achieve what we want with 3 billion?. You can imagine that even this 3 billion is only approved after haggling and overlong discussions, claiming that we overestimated the cost and that the buildings would not cost this amount: we tell them, if they do not believe us, this is what the offers are saying and this is the market price."* (Auditor, KKU)

Another interviewee in KFUPM described the annual budget as both inflexible and strict, stating:

*"Each year we receive our budget from the Ministry of Finance and we receive a detailed handbook that contains guidelines on how to spend the budget. These guidelines are very strict and we must spend according to them. We cannot transfer the money from one chapter to another or between items without approval from the Ministry of Finance."* (Auditor, KFUPM)

Deans and directors in KKU complained of not being allocated a certain amount from the budget in order to finance the colleges' activities and maintenance of facilities. All activities are centrally financed through the university budget and must be approved by the university management.

*"There is something else. Deans do not have any financial authority and cannot have our own budget for the college, so we do not know what is allocated for our college in the budget. I will send you to our finance director at the college to ask him how much*

*our budget is and he will tell you that do not have anything other than SR 1000, to be spent on hospitality only. We have other costs that are more important than hospitality."* (Dean, KKU)

Another dean expressed his dissatisfaction with this, saying:

*"Of course, there is a budget but we have no control over it. It is only the right of the university president or his vices, so we are not financially independent and flexible. This is very annoying and restricting, as we must go to the top management in most cases."* (Dean, KKU)

When asked about the reason behind this restriction, many participants in KKU stated that it is a common and general practice in many Saudi universities and public sector organisations that is intended to prevent the misuse of power: it is a protective action against the threat of financial corruption.

One of the vice-presidents justified this centralisation, stating that the university management tries to be fair when dealing with all colleges and departments

*"Frankly, the majority of requests from colleges and departments are met without the need to allocate separate budgets for each college. It is true that some universities give departments and colleges certain amounts to spend independently but we are a different case. We have some newly established colleges that require many things and huge equipment needs in their first years and, therefore, if we gave them a specific budget, it would be unfair to them because they will need more in the early years and, if we gave them more, it would be unfair to other colleges. The university seeks to meet the needs and desires of everyone according to its overall vision."* (Vice-president, KKU)

The same situation occurred in KFUPM as its deans also lack control over college budgets. Some deans, however, did not feel dissatisfied with this issue due to the smooth and easy system established for fulfilling the requirements of the college. All the deans must do is report their requirements in a systematic way to the university management, which will take immediate action to meet those needs.

In terms of administrative centralisation, many participants mentioned that, like other universities, top management is responsible for making most decisions, while deans and heads of departments have only limited authority. One participant commented:

*"Deans and heads of departments do not have absolute power or authority and this is always discussed at the university. Even small things like hiring or firing any employee*

*at the college are not the authority of the dean. If you make a content analysis for all the paperwork issued in the dean's office, you will find that he always says "I recommend such and such", which means that he does not have the ability to make a decision, except in few things related to students. But, to be honest, the vast majority or all of the things that the dean recommends are approved by the top management."* (Dean, KFUPM)

A number of other interviewees indicated that administrative centralisation leads to a situation in which most deans and heads of departments fail to pay attention to the quality of their recommendations because they are not accountable for them.

*"In theory, yes, we have the authority but not in reality. I think that this tendency of centralisation can have an invisible impact on our performance. All I can do is to recommend a decision, rather than take the decision, and, therefore, I would not spend a significant time on the issue but will let it go up to the university management to take the responsibility for it. I believe, if I had the power to take the decision, I wouldn't do this and I would pay much more attention to the matter before I take the decision because, at the end, I am responsible and accountable for it. So it has become a kind of dependency on the top level, and it may have consequences on performance."* (Dean, KFUPM)

Another group of participants indicated that the limited authority of deans and department heads was theoretical only: in practice, many decisions are taken in the colleges. What makes deans claim that they lack power is that they are not confident to exercise the authority granted to them because they do not want to be accountable for wrong decisions. Therefore they are protecting themselves by transferring all their decisions to the top management. One interviewee commented on this as follows:

*Our university, since it was first established, was built based on rules and regulations; it was not based on people. It is known that the powers of the deans and heads of department are clearly documented. I believe that there is much authority granted to the deans but some have overlooked them or sometimes are afraid of exercising them due to their fear of accountability. Based on my administrative experience as a dean for more than four years, I know that I have much power but I might not use it all. I will give you an example: one of the employees once came to tell me that there were a lot of old books in the stores that were not used and should be destroyed to make more space. I know well that disposing of those books was within my authority but, because I was concerned that one day someone might come to me claiming that I destroyed valuable books, I protected myself and asked for permission from higher authorities to destroy them.* (Dean, KFUPM)

### 7.4.8 Favouritism *(Wastah)*[9]

A number of interviewees, particularly those in lower positions, considered Wastah to be a major problem. Many of them blamed Wastah for negatively affecting their promotion opportunities and motivation to work hard. A typical comment was:

*"It does not matter if you work hard or not, the one with Wastah is the one who can get the better treatment."* (Staff member, KKU)

Others agreed with this, pointing out that even management positions can be gained through Wastah, rather than through qualifications and skills. Others expressed their dissatisfaction about the unfairness of Wastah. One of the participants commented on this by saying:

*"Anyone with good connections is lucky, because he can overcome rules and find his way around the regulations."* (Director, KKU)

Others saw Wastah as a part of the local culture and that most people cannot eliminate this behaviour, even in minor issues such as applying routine procedures.

*"Yes, the local culture does not understand planning. Frankly, one of our goals in the university is to apply justice and transparency in admissions and registration. But society does not understand this very much and they usually accuse us of favouritism and there are many people who come to my office accusing me that I treat people differently according to connections with them. What can I do, this is the culture of this place. Some friends usually call me to ask me a favour, if I know an official somewhere to facilitate the procedures of his request in that organisation, people has become too much dependent on Wastah. Our culture is still relying on Wastah, while our university is planning to apply transparency and justice in its admissions but, as you know, a large part of the society do not understand that."* (Dean, KKU)

Some participants in KKU were enthusiastic about eliminating Wastah and believed that it could be removed if the top management wished it. Others considered that eliminating Wastah is not possible in a society such as Saudi Arabia, where cultural norms play a big role. A third group of participants saw Wastah as a minor issue and

[9] Favouritism means the tendency to provide preferential treatment to relatives or friends. This term in the Middle East is often referred to by the Wastah (واسطة), which means connections or influence (Loewo *et al.,* 2007).

argued that it could sometimes be positive to help people avoid complex procedures and thereby speed up the decision-making process.

Many interviewees in KFUPM believed that Wastah is a behaviour related to traditional societies where people feel injustice and unfairness; therefore, Wastah is used as a means to obtain their rights. Most of them saw Wastah as a national behaviour rather than the behaviour of a particular city or region. Most did not agree that Wastah could be identified easily in the university. They saw Wastah as a negative behaviour and argued that the university has its objectives as well as transparent rules and regulations, which do not allow Wastah to take place.

*"We select staff according to specific criteria, which are well-known to everyone and these are skills, qualifications and experience. Personal standards or social relations do not play a role in it."* (Director, KFUPM)

This attitude was supported by the researcher's own observation of an occasion upon which an interview with one of the deans was interrupted by the father of a student, who asked the dean, as a favour, to make the exception of accepting his son into accommodation despite having missed the application deadline. The dean refused to treat the student differently, even though the father tried to convince him that he had friends at the university whose applications had been accepted after the deadline. The dean insisted that no one is treated differently and that exceptional cases are made only for students with medical reasons.

### 7.4.9 Strategic planning

KKU does not have a written long-term strategic plan, with many participants indicating that the university is more engaged in its day-to-day operations. It has a number of general objectives, which are intended to meet government obligations in producing well-qualified graduates, promoting research and serving the community. Many interviewees expressed their happiness with the newly established National Commission for Academic Assessment and Accreditation, which will impose a requirement on all universities to form their own strategic plan. One of the interviewees commented on this by saying:

*"I know it is really shameful that we do not have a strategic plan but what can we do? We are a new university and are still struggling to build our campus. At least we have the National Commission and they are putting pressure on us to prepare a strategy for our university, I am happy about this because we need someone to help us and guide us."* (Vice-president, KKU)

KFUPM, on the other hand, has already taken the initiative by creating its first five-year strategic plan (2006-2011) with a clear vision and mission. This plan reveals a set of strategic issues and objectives, while an action plan has been developed that comprises a number of well-defined projects, together with an implementation strategy.

*"For nearly four years we have been trying to measure our performance through performance indicators that we designed in light of the tasks of the university, such as teaching, research and community service. These performance indicators were compared with indicators of previous periods as well as with those of other universities in the world. We continued in the application of these indicators until we found it necessary to develop a strategic plan because we wanted to know where we are going. In recent years, we started to develop a strategic plan for the university and we have created the Office of Planning and Quality, which is responsible for developing the strategic plan of the university. Our strategy was built locally and has a set of well defined and measurable goals and programmes."* (Vice-President, KFUPM)

KFUPM was also required to prepare another strategic plan, to meet the requirements of the National Commission for Academic Assessment and Accreditation. One interviewee commented:

*"We already have our own plan, but we were required to prepare another one for the Ministry of Higher Education. It is not very much different than our existing plan but it lacks so much details that ours cover."* (Director, KFUPM)

### 7.4.10 Documentation level

With regard to documentation of policy and procedures, all participants in both universities agreed on the importance of this issue. In KKU, there was little documentation of processes and procedures. Documentation of processes in the university was prepared through individual initiatives and not by organisational requirement. Job descriptions in KKU, for example, were lacking in detail and were mostly completed for jobs that were previously described by the Ministry of Civil Service.

*"Well... in fact, we have no clear description of our jobs, many of us perform our jobs according to experience, not based on certain and written roles. The majority of deans suffer from lack of clarity, especially the new ones where they feel confused and lost when they start their jobs. Let me give you an example: when I started my job as a*

*Dean of Libraries, there were no clear and written procedures as to how to purchase or dispose of books, so I needed to contact the previous dean and ask experienced staff about it. Then I believed that job and process description is important in order to facilitate tasks and save time."* (Dean, KKU)

Many interviewees indicated that the lack of job description was because of the limited number of staff and, therefore, the need for greater flexibility for performing tasks.

*"In fact we did not think of documenting job descriptions. It may be that the reason for this is giving greater freedom and flexibility to the staff, as we suffer from a shortage in many positions so we sometimes need to give more duties to our staff."* (Dean, KKU)

Additionally, there have been individual attempts to document some of the processes:

*"I have managed to issue a booklet for the purchasing processes in order to facilitate these processes at the university and transfer my experience to others, because I found that many errors were made on an ongoing basis and I wanted to have it documented through the transfer of my experience in these things."* (Auditor, KKU)

Many participants in KFUPM indicated that there was an accurate description of most jobs except for the higher positions, which have general descriptions provided by the Ministry of Higher Education. The majority of participants also mentioned that most processes are documented and clear for every member in the university. Some participants believed that the American system of the university played a significant role in the promotion of clarity and accuracy.

*"Our engagement in the American system has a great influence in terms of documentation of processes and job description. You know Americans are mad on details and they established this university on a very strong basis."* (Dean, KFUPM)

### 7.4.11 Leadership style

Participants' perception of leadership style was another category observed from two aspects: styles of leadership and impact on change in universities. The relevant leader in this category is the university president.

The style of leadership prevalent in KKU was described from the participants' point of view as conservative and dominant, in which the leader has absolute power over many issues within the university. Many interviewees complained that the president does not allow them take part in making decisions and, further, does not trust them to become

involved in strategic issues. They also mentioned that this role is very important in the change process and that change should usually come from the top.

*"Well... in this university I feel that I am only involved in minor and day-to-day issues inside the college and do not have a chance to decide in many strategic cases. What usually happens in the university board meeting is that we meet with the president and his vices to discuss very few issues. The president usually gives his opinion first and the discussion shyly starts and we vote on the decision; the president has the right to accept it or reject it. We do believe in the importance of change but the leadership of this university does not encourage us to be involved in the change process. If you get involved in one of our meetings, you will feel the negative atmosphere there."* (Dean, KKU)

Another interviewee commented on this by saying:

*"We have a strong bureaucratic leadership in the university. Deans do not have authorities to make decision on simple things, such as increasing the salary to attract faculty members, while other deans in other universities have 50% of financial authority. This is really frustrating isn't it?"* (Dean, KKU)

Conversely, the style of leadership in KFUPM tends to be participative, in which the president has a positive attitude towards including others in the decision making process. A number of deans and faculty members expressed their satisfaction with their leadership in some aspects, such as positive dialogue and open discussion among all members in the university, including students, and the encouragement received from the leader towards change and creativity.

*"Well... the best thing about this university is its leadership ...you know it is an open atmosphere, you can discuss whatever you want and give your opinion honestly. Also, we can contact the president of the university directly to discuss what whatever we want. Students, as well, have their own forum with the president to complain or discuss their things."* (Vice-president, KFUPM)

### 7.4.12 Attributes of universities

Participants' perceptions of the attributes of the universities was a category observed from three aspects: size, age and specialisations.

There was a wide consensus among the participants from the two universities that the size of a university is one of the key factors for excellence in performance or, alternatively, sometimes a reason to explain failure. Many participants in KKU stated that the large number of students served by the university was one of the most difficult problems that it faced, having a negative impact on performance. On the other hand, interviewees in KFUPM agreed on the fact that its small number of students helped the university to provide a high quality service to both the students and staff.

It was also agreed that the age of the university is an important factor that may have either a positive or a negative impact on the maturation of the administrative experience at the university. KKU is considered to be new, with no more than 12 years of experience, and therefore all participants commented that the university continues to undergo stages of trial and error and also uncertainty. Conversely, KFUPM is one of the oldest universities in Saudi Arabia, with mature experience and well-established rules and laws.

Specialisation was another key factors referred to by many of the participants. KFUPM is renowned for being a specialised university, offering only engineering and industrial disciplines; this has helped it to focus on its mission and unify the culture of its organisation. In contrast, KKU has many colleges that offer multiple disciplines, such as engineering, medicine, literature, science, religious studies and management among others. There was a consensus among participants that this has had a negative impact its ability to create a unified organisational culture and to focus on its mission.

### 7.4.13 Relationship with government

Participants, together with the supporting documents, all agreed that universities, just like other governmental organisations, are subject to external supervision and control. This is performed by government agencies, such as the Ministry of Finance, the General Auditing Bureau, the Control and Investigation Board, the Ministry of Higher Education and the Ministry of Civil Service. These controlling bodies are responsible for ensuring that all plans, decisions, transactions and policies within the universities are implemented according to proper procedures and measures stipulated in government laws and regulations.

The Ministry of Finance is responsible for management and control of all government finance, such as the budgeting and expenditures of all universities. It established the role described as the Financial Representative in every university, to achieve its control role. This Financial Representative is responsible for performing pre-audit financial controls in each university. He is tasked with monitoring execution of the budget

according to financial laws and regulations, ensuring that payments are limited to the approved expenditures specified for each chapter of the budget and ensuring the legality of transaction documents and the financial accounts of the university with its branches. He is also responsible for reporting on these matters directly to the Ministry of Finance.

The General Auditing Bureau is an independent control organisation, responsible for carrying out post-auditing on all government revenues and expenditures, as well as current and fixed assets, and for overseeing the proper utilisation and maintenance of these resources. In other words, the bureau is tasked with ensuring that the revenues of all governmental organisations, including universities, have been appropriately collected and entered into books according to the regulations and, further, that their expenditures have been consumed according to the provisions contained in the annual budget and regulations. It is also responsible for ensuring that fixed and current assets of the universities are employed in such a way as to achieve the objectives of their allocation; it must also check that a university possesses the ability to preserve the safe custody and appropriate deployment of such resources so that they remain safe from abuse. Meanwhile, the Control and Investigation Board has the role to control, investigation and follow up administrative and financial violations that are forwarded to it by any authorised official department or revealed by the controlling entities; this role must be performed in such a way that does not contradict the authority of the General Auditing Bureau. One of the interviewees commented on this saying:

*"Of course, we are open and transparent to all controlling bodies. The General Audit Bureau is interested in financial matters and we are confident that all our financial procedures are according to the legal requirements and we welcome all help to achieve control and close any gap that might occur in our performance. The Control and Investigation Board is also interested in other matters, such as monitoring the performance of employees, and again we are open and transparent to provide any information to them to help them in monitoring the attendance of staff and any other matters they are interested in. What I mean is that we have nothing to hide and all our performance procedures are matching all the government regulations and rules."*
(Vice-president, KKU)

Another participant pointed out that the role of the General Auditing Bureau fails to consider the full picture relating to financial performance:

*"I believe that the auditors of the General Auditing Bureau are wasting our time and theirs, as we spend too much time in the auditing process. They do not look for serious things, like cost efficiency; no, they only see minor problems related to documentary or*

*legal audits and statutory issues. They only want to know if expenditures are spent as stated in the budget."* (Accountant, KFUPM)

The Ministry of Higher Education is another body that plays a role in central supervision, co-ordination and follow-up for universities. It supervises strategic decisions for the universities through a university council, which is chaired by the Minister of Higher Education. It also oversees the National Commission for Academic Assessment and Accreditation, which prepares and controls quality standards for institutional and programme performance, and the National Centre for Assessment in Higher Education, which provides standardised tests for evaluating secondary school graduates prior to their university admission.

Another source of control is the Ministry of Civil Service, which oversees universities through the imposition of laws and regulations on the employment of Saudi administrators and faculty members. These require that there must be coordination with the Ministry in case of hiring or firing Saudi staff. Most participants in both universities were dissatisfied with the lack of autonomy over the appointment of staff, as well as determination of their salaries, and associated this with intervention by the Ministry of Civil Service, which forces universities to replace non-Saudi staff with Saudis. They also considered that this lack of autonomy led to staff shortages in many administrative positions.

Many participants agreed that the rules and regulations state that universities are organisations that enjoy financial and administrative autonomy, when compared to other government agencies in the state. However, they all agreed that what is practiced in reality is often quite different, as Saudi universities find that they do not have independence in many daily financial and administrative cases.

### 7.4.14 Relationship with other stakeholders

Other stakeholders is a category defined as non-governmental organisations that impose performance standards on universities. It was agreed by many participants that KKU is not accountable to external stakeholders other than the government itself.

*"We are solely funded by the government so we are solely accountable to them, we do not get funds from anywhere else."* (Vice-president, KKU)

Another interviewee referred this lack of relationship to the location of the university:

*"Because we are in a region where there are no large companies, the external support for research is very limited and almost negligible but what usually happens is that researchers go individually and directly to the supporters and show them their research proposals and ask them for a financial support and, hence, the university gets nothing from that."* (Dean, KKU)

KFUPM, however, has other stakeholders, which can be defined as non-governmental funders and non-governmental accreditation agencies. The university has a good relationship with a number of national and international entities, from which it receives generous support for research purposes.

*"The research fund comes from several organisations other than the amount allocated to us in the annual budget. There are many national and international companies support us generously and we are managing this support and deliver it to researchers in the university as a connection point between the researcher and funder. Most supported research is consultative so these organisations usually consult us to solve a specific problem they are facing and usually the fund is big, which is very good."* (Dean, KFUPM)

These funding organisations do not impose performance measures on the university but the achievements of funded research must be reported to them. Another type of stakeholders are international accreditation agencies, which impose a number of standards and measures in order that the university be accredited by them.

*"Most of our programmes are accredited by ABET, which stands for Accreditation Board for Engineering and Technology. What you can find here is substantially equivalent to other international universities accredited by ABET. I am also involved in the programmes assessment and I know that most programmes in the university are accredited by other agencies, such as the Computer Science Accreditation Board, the National Architectural Accrediting Board, Association to Advance Collegiate Schools of Business and so on. We are concerned about the quality of our programmes so we are trying to compare ourselves with other international competitors."* (Dean, KFUPM)

### 7.4.15 Financial accounting

Similar to other government organisations, both universities are required to keep a number of accounting double-entry books, journals and ledgers. They are not allowed to modify the accounting books or create new ones. Most accountants in both universities mentioned that the financial accounting in the universities is outdated, since the sizes and activities of the universities have increased over time.

*"Our financial system was created in 1954 and since that time it has not been updated or adjusted, despite the large differences that have occurred in the nature of universities and government work since that time."* (Auditor, KFUPM)

Another characteristic of this accounting system is the length and complexity of its procedures. For example, payment vouchers go through many departments to be revised, audited and signed by officials before they are finally paid. A cash basis is used in all Saudi public universities, although there is an increasing demand to implement accrual accounting in order to meet the development in university sizes and activities. One accountant commented on this by saying:

*"Yes, I think accrual accounting is important in order to present the real transactions of our university because we deal with many accrued and prepaid accounts and, therefore, the cash basis does not provide a clear image of our performance during the financial year" (Accountant, KFUPM).*

At the end of the financial year, all universities are required to prepare a detailed financial report that is checked by an external auditing agency. This report goes to the Ministry of Finance and the General Auditing Bureau.

### 7.4.16 Budgetary system

The government, through its annual budgetary allocations, finances the universities' budgets. These are divided into four categories according to economic activities. They are: chapter one for items related to wages and salaries; chapter two for administrative and operational expenses; chapter three for operation and maintenance programmes; and chapter four for funding projects. Other items – such as contingency expenditure, interest payments and subsidies – are managed by the Ministry of Finance. All universities are allowed to undertake paid scientific studies and consultancy with other Saudi agencies in order to seek new means of financing. They are also permitted to accept donations, gifts from individuals and agencies.

Many participants stated that the elements of the budget are estimated largely using the basis of the previous year's budget. They also pointed out that the budget has to go through many stages before it is finally approved. Budget preparation begins in the Ministry of Finance, which sends the current year's Budget Preparation Manual to the universities. This manual includes forms and procedures to help universities prepare expenditure requests for the following year. Universities should organise requests according to the four chapters outlined above. All requests must be justified with

supporting documentation and evidence; they are reviewed by the Ministry of Finance, especially requests for increased funding. After submitting budget proposals, the Ministry of Finance reviews and negotiates proposals with each university. The Ministry of Civil Service participates in the negotiation of chapter one in order to ensure that requests meet their rules and regulations. Other chapters are also negotiated in the presence of representatives of relevant agencies. The negotiation process may be lengthy, especially when universities cannot reach an agreement with the Ministry of Finance. This usually occurs upon discussing large programmes or at times when oil income is low. After a provisional agreement has been reached, universities may undergo another round of negotiation to set priorities for requests if further modification to the budget is needed. Following this, a second draft is prepared for submission to the Council of Ministers. The Supreme Economic Council reviews all government budgets according to current macroeconomic conditions. Cuts may be made if the budget deficit is considered unacceptable. Finally, the Supreme Economic Council endorses the proposals and obtains the approval of the King.

### 7.4.17 Cost accounting

The concept of cost accounting does not exist in the accounting system of the two universities, confirmed by many accountants and financial auditors. KKU does not have any mechanism to measure the cost of students or academic programmes. One accountant commented on this by saying:

*"We receive a specific budget from the government and we should spend it all, no one asks us about the cost because much of expenditure that we request in the budget is only an estimate and is not precisely defined, so why care about the cost?"* (Accountant KKU)

The same occurred in KFUPM, as they are not required by the regulations of the Ministry of Finance to measure cost.

*"In the government, anything that has been paid equals zero, even if it cost one million riyal, gone is gone hahaha."* (Auditor, KFUPM)

Another participant confirmed this:

*"Of course, the issue of cost can be important for private universities but as a public university we are only interested in quality because we have a fixed budget from the state at the end of the year and we must spend it all. We are trying to spend the money in something important that gives us good output. So the question is not how much*

*money we have but how do we utilise the budget. This is very important and this applies to public and private universities. Private universities sometimes sacrifice quality for money. So we do not get into the details of money and your question can be asked in the financial management department.* (Director, KFUPM)

However, two participants responsible for quality and performance indicators mentioned that cost of student is included in the detailed key performance indicators report. They also pointed out that this report is for internal use only and so they are not required by the government to disclose its details to any external parties.

*"Yes, cost of student is calculated through a particular formula that I cannot remember at the moment. It is only for internal use and no one asks us to include it in our external reports."* (Director, KFUPM)

### 7.4.18 Performance measurement

KFUPM has set a number of key performance indicators (KPIs) to measure the outcomes implied by the strategic plan. These indicators are specified to measure the objectives of several key processes, such as teaching and learning, research, community services and other general objectives. A total of 17 KPIs have been quantified and summarised in a simple statistical way, only two of which are financial-based indicators: total budget allocated to research and income generated from projects. Details of the achievement of annual KPIs are reported to the university board and the international advisory board. Less details of the KPIs are included in the university annual report, which is presented to the Higher Education Council, the Ministers Council and the Consultative (Shura) Council.

KKU, on the other hand, includes no more than some basic numerical information in its annual report to the above three governmental councils. This information includes simple frequency tables and graphs, such as numbers of new students, graduates, staff and faculty members, non-curricular activities, research projects, book collections and services to the community. These numbers are not reported against any targets that had been set previously.

Both universities are also required by the National Commission of Academic Assessment and Accreditation to conduct initial self-assessment. Consequently, they are expected to prepare a strategic plan for quality improvement that fulfils the requirements for quality assurance and solves any problems identified in the initial self-assessment. The National Commission then requests universities to report the performance of both the institutions and programmes according to eleven general

standards. These standards are 1) Mission and Objectives, 2) Governance and Administration, 3) Management of Quality Assurance and Improvement, 4) Quality of Learning and Teaching, 5) Learning and Teaching, 6) Student Administration and Support Services, 7) Learning Resources, 8) Facilities and Equipment, 9) Financial Planning and Management, 10) Employment Processes, 11) Research and Institutional Relationships with the Community.

## 7.5 Summary

This chapter has summarised the developing themes in the research topic and, later, stretched these out via open coding, which is the primary stage of grounded theory analysis. It resulted in eighteen open categories. These categories included participants' perceptions of performance measurement, uncertainty, human resources, infrastructure, social context, organisational culture, centralisation, favouritism (Wastah), strategic planning, documentation of policy and procedures, leadership style, attributes of universities, relationship with government, relationship with other stakeholders, financial accounting, budgetary system, cost accounting and performance measurement. In terms of their distinguishing characters, these were explained at various levels of densities. A restricted attempt was made to investigate the connections between the categories of open categories.

This chapter attempted to present the elements of distinguishing attributes of the phenomena, which will be connected more closely in the next chapter in order to help flesh out the developing grounded theory. Therefore, in the next chapter, the connections between the open categories are studied and explained. Its aim is to develop higher order categories, which are theoretically more complex and denser.

# CHAPTER 8: AXIAL CODING

## 8.1 Introduction

In this chapter, progress is made in grounded theory analysis using the open categories. The distinguishing features of the phenomena are subjected to a greater degree of scrutiny, during which the major categories are developed from the open categories. This difference between the open and axial coding is not real in research reality because the grounded theory analysis is a process that keeps repeating and moving forwards and backwards between open and axial coding as the categories increase in density as well as richness. Nevertheless, the reason behind this difference is to increase the simplicity of arranging the text.

In this chapter, the aim of developing greater order categories is stated; it then moves on to show the techniques of researching and identifying the connections between categories in order to draw from them the major categories. The remainder of the chapter explains the six major categories established.

## 8.2 Generation of main categories

By breaking down the data, open coding allowed recognition of eighteen categories; axial coding now arranges and looks for connections between the categories (Strauss and Corbin, 1990). The main purpose of axial coding is to attain theoretical complexity through an additional progress of analysis, as well as making connections between the open code categories (Strauss, 1995). The ultimate achievement of axial coding is a compilation of higher order categories, which are also called the major categories. These categories have a lot of strong connections with other lower level categories (theoretical density) and also have the capability to incorporate with categories of a higher level (theoretical complexity). Accordingly, the open code categories now turn into sub-categories. The connections between the main and subsidiary codes are represented in table 8-1 below.

### 8.2.1 Relationships between categories

Open and axial coding are phases of analysis that cannot be separated; each alternates with the other as the analysis develops. It is simple to detect the primary connections among the initial open code categories because it is a repeating process. The following

has been suggested by Strauss and Corbin (1990) as a course of action while extending additional connections between the categories:

*"Posing questions in terms of the conceptual labels themselves, and how one category might be related to another. With such category relating questions in mind, we then return to our data and look for evidence, incidents, and events that support or refute our questions. At the same time that we are looking for evidence to verify our relationship, we are also looking for instances when they might not hold up."* (Strauss and Corbin, 1990, p.108)

Table 8-1 shows the result of the method of posing questions that seek connections between the primary eighteen categories resulting from the open coding. The connections of categories underwent several repetitive alterations; table 8-1 shows the ultimate result of this method of looking for connections. The six major categories identified are explained in the next section.

The consequent discussion of the main categories involves the chief aim of axial coding, which is determining the connections between categories. As a result, the discussion in this chapter does not research into the comprehensive part as this has already been undertaken during open coding. The main categories in table 8-1 are discussed below.

**Table 8-1: Main Categories**

| Main Categories | | Related Open Categories | |
|---|---|---|---|
| 8.3.1 | Accountability | | Centralisation<br>Organisational culture<br>Quality of decision-making |
| 8.3.2 | Organisational properties | | Human resources<br>Infrastructure<br>Documentation level<br>Attributes of university |
| 8.3.3 | Constraints of strategic planning | | Uncertainty<br>Strategic planning<br>Relationship with the government |
| 8.3.4 | Accounting practises | | Relationship with the government<br>Financial accounting<br>Cost accounting<br>Budgetary practices<br>Performance measurement |
| 8.3.5 | Legitimacy seeking vs. Autonomy seeking | | Relationship with the government<br>Relationship with other stakeholders<br>Performance measurement<br>Strategic planning<br>Organisational culture |
| 8.3.6 | Cultural aspects of trust | | Favouritism (Wastah)<br>Social context<br>Organisational culture<br>Centralisation<br>Leadership style |

## 8.3 The main categories

### 8.3.1 Governance

This category consists of three smaller sub-categories, which are centralisation, quality of decision-making and accountability.

**Table 8-2: The main category of governance**

| Open Category | Dimensions | | | Main Category | Dimension |
|---|---|---|---|---|---|
| Centralisation | Low | ⟷ | High | Governance | Effective ⟷ Ineffective |
| Quality of decision-making | High | ⟷ | Low | | |
| Accountability | High | ⟷ | Low | | |

As mentioned in the previous chapter, the financial and administrative authority granted to the deans and heads of departments is limited to some extent, with the top management of the universities taking many decisions for the colleges and academic departments. A number of participants said that centralisation has resulted in a culture of fear of accountability, as well as affecting the quality of decisions taken.

Centralisation has caused many deans and heads of departments to lack confidence in making decisions that fall within their authority. This is because they fear to be held accountable for such decisions; therefore, they prefer to abandon their given power and seek approval from a higher authority. Many interviewees commented that this creates delay in daily operations.

In terms of quality of decision-making, many deans said that much of what comes from colleges and departments takes the form of recommendations, not final decisions. Therefore, they said that this had resulted in indifference towards the quality of such decisions. Deans and heads of departments are not responsible for the final decision; thus, they do not spend sufficient time investigating the consequences of decisions because they are not accountable for them. In addition, many participants pointed out that they do not have financial power and that all activities and transactions are funded by the central budget of their university. This financial centralisation influenced the quality of decision-making, as deans and heads of departments do not take into account financial considerations due to lack of knowledge and involvement in financial issues.

Therefore, financial and administrative centralisation has a clear impact on both organisational culture (fear of accountability) and the quality of decision-making.

### 8.3.2 University condition

This category consists of four smaller sub-categories, which are human resources, infrastructure, documentation level and the attributes of the university (i.e. type, size and age). The sub-categories formed the so-called organisational properties.

**Table 8-3: The main category of university conditions**

| Open Category | Dimensions | | | Main Category | Dimension |
|---|---|---|---|---|---|
| Human resources | Sufficient | ⟷ | Insufficient | University condition | Developed ⟷ Developing |
| Infrastructure | Sufficient | ⟷ | Insufficient | | |
| Documentation level | High | ⟷ | Low | | |
| Type | Specialised | ⟷ | Multi-disciplinary | | |
| Size | Small | ⟷ | Big | | |
| Age | Old | ⟷ | New | | |

As mentioned in the previous chapter, universities suffer from a lack of qualified human resources. This shortage varies from one university to another: it was found that KKU suffered from a significant shortage of administrative staff, while the shortage in KFUPM was less. This difference in needs was attributed to the characteristics of the two universities in terms of age, size and specialisation. KKU is a large university with a large number of students of both genders, providing a range of scientific, art, religious and administrative specialisations and, at the same time, is also a new university with just 12 years of experience. A number of interviewees agreed that these attributes have a significant adverse impact on the availability of human resources. Conversely, KFUPM is considered to be a small university, serving only male students and specialising in industrial and engineering disciplines; it is also one of the oldest established universities in the Kingdom of Saudi Arabia. The participants explained that these characteristics had a positive impact both on the excellence of the university in general and on what appears to be a smaller shortage of human resources than that suffered by other universities.

These factors apply to the infrastructure issue, as university age, size and specialisations have an impact on the availability of infrastructure. KFUPM participants, for example, did not complain of the lack of infrastructure; in fact, many mentioned that infrastructure had been provided throughout the long years of university life there. Many also pointed out that the limited size of the university made it even easier

to provide and maintain buildings and facilities. Conversely, KKU suffered mainly from large shortage of infrastructure, which the participants attributed to the age of the university as well as to its large size.

In terms of documentation level, many participants indicated that this could also be related to the age of the university, in that older universities have more documentation in place for processes and procedures than new universities. Newly established universities have other priorities to complete, which are perceived to be more important than documentation. Others mentioned that the lack of human resources led to the need for flexibility in performing tasks meaning that, in fact, job documentation would restrict their freedom.

### 8.3.3 Strategising

This category consists of four smaller sub-categories, namely uncertainty, the relationship with the government, university condition and university identity.

**Table 8-4: The main category of strategising**

| Open Category | Dimensions | | | Main Category | Dimension | | |
|---|---|---|---|---|---|---|---|
| Uncertainty | Low | ⟷ | High | Strategising | High | ⟷ | Low |
| Relations with the government | Independent | ⟷ | Dependant | | | | |
| University condition | Developed | ⟷ | Developing | | | | |
| University identity | Western | ⟷ | National | | | | |

Many of the participants described the external environment as unstable in terms of the political and economic perspectives. The political crises experienced in the Middle East, such as the frequent wars and internal crises recurring in neighbouring countries, has created a climate of instability in the entire region and in Saudi Arabia in particular. These political crises have created uncertainty in the oil industry, on which Saudi Arabia is entirely dependent for funding its annual budgets. The instability in the region has made oil prices vulnerable to continuous fluctuation, which makes the process of long-term planning for the entire state very difficult. Many participants reported that, despite an increase in oil prices following the two Gulf wars, the deficit in the state's budget has also increased because Saudi Arabia spent a large percentage of its budget on financing its defences and armaments. However, many interviewees also pointed out that, thanks to stability during the last five years, the outlook seemed more positive for the state's budget.

Because universities are almost entirely dependent on the state's budget, political and economic instability significantly affected the income of universities and their expansion plans. Many participants said that long-term university projects had been postponed due to the recurrent deficit in the state's budget, which had caused great confusion for existing plans and made the strategic planning process uncertain. Even following the country's economic improvement, the strategic situation of the universities has not improved significantly because of the government's tendency to finance other strategic projects and to establish more universities, rather than to improve existing ones.

Many interviewees also explained that internal uncertainty has a significant impact on the process of strategic planning in universities. There have been many sudden and unplanned political decisions imposed upon universities, such as determination of the number of secondary school graduates entering universities. A number of participants pointed out that it is in the politicians' interest to absorb the anger and pressure of people who want more places in universities and, therefore, they are forcing universities to accept more students despite the lack of infrastructure and insufficient number of faculty members. It was reported by many participants that this matter is one of the biggest obstacles hindering the process of long-term strategic planning.

In conclusion, external uncertainty resulting from the lack of political and economic stability, in addition to internal uncertainty resulting from sudden government decisions, had a major impact on strategic planning within universities because they do not have full autonomy from the government, either financially or administratively.

### 8.3.4 Accounting practises

This category consists of five sub-categories, which are relationship with the government, financial accounting, cost accounting, budgetary practices and performance measurement.

**Table 8-5: The main category of accounting practices**

| Open Category | Dimensions | | | Main Category | Dimension |
|---|---|---|---|---|---|
| Financial Accounting | Outdated | ⟷ | Updated | Accounting practices | Substantive ⟷ Symbolic |
| Cost Accounting | Existing | ⟷ | Not existing | | |
| Budgetary System | Traditional | ⟷ | Contemporary | | |

The government, represented by the Ministry of Finance (the largest government funding body), attempts to unify and standardise the procedures of all government

organisations that are funded by the Ministry. Among these procedures are government accounting systems. The financial accounting system used in universities is based upon several outdated processes and procedures, which are imposed on universities despite their irrelevance in some cases. The traditional budgetary system implemented in universities also limits their performance as it lacks flexibility for many important tasks, such as the transfer of money from one chapter to another or between items. Financial accounting and the budgetary system are closely connected to one other because they each have the same objective, that is to control the expenditure and revenues of universities and ensure that the budget is spent according to the legal requirements set by the Ministry of Finance.

The concept of cost accounting does not exist in the government accounting system because it is ignored by regulatory agencies, such as the Ministry of Finance and the General Audit Bureau. Measuring cost is not the concern of the government; many of the items on the budget are estimated by the universities and there is no basis for pricing and determining their cost. Where attempts are made to measure cost, they are not required or imposed by the government but are undertaken due to internal concern within the university in order to provide information that can help in decision-making. Thus, there is no relationship between the government accounting system and budget system with cost accounting.

Attempts to measure financial performance were based upon the requirements of financial regulators for financial control through the imposition of certain procedural standards on universities. Consequently, these attempts are described as performance auditing, rather than performance measurement. Other attempts to measure performance were conducted on a non-financial basis, the aim being to rationalise the decision to achieve the goal of quality assurance through the provision of information of non-financial performance. Consequently, attempts to measure performance in the universities have no connection to the accounting system used in both universities.

In conclusion, the indifference of the Ministry of Finance to the concept of performance measurement and quality assurance has led to the neglect of this concept in accounting regulations and, therefore, in the accounting system that is imposed upon universities. All attempts to apply performance measures were either a self-initiative of the university or the imposition of some other supervisory authorities concerned only with quality of output; they are not related to the financial system or accounting at the universities.

### 8.3.5 Legitimacy seeking vs. autonomy seeking

This category consists of five sub-categories, which are relationship with the government, relationship with other stakeholders, performance measurement, strategic planning and organisational culture.

As discussed in the open coding chapter, there is a tendency for universities with an organisational culture of independence not to be constrained by rules and regulations imposed by the government. Examples of such regulations are the employment standards imposed by the Ministry of Civil Service and the accounting controls imposed by the Ministry of Finance. These rules must be followed in order to legitimise the use of resources and administrative decisions. On the other hand, the government regulations may be considered a limiting factor that hinders the autonomy of the university in making its own decisions. As well as following the government's legal requirements, universities with a tendency towards independence usually use their own initiatives in order to increase their autonomy. Examples of such initiatives are the independent strategic plan separated from that imposed by the government and the standards of performance that fit with the strategy. A key means of establishing greater autonomy is to search for external funds and to be involved with international accreditation agencies.

Conversely, a university with less tendency towards independence usually attempts to rely upon the government for initiatives of change and, further, works according to the government rules and regulations. Such a university relies solely on government funds and does not attempt to seek external support. In terms of accreditation, government standards only are applied and no attempt is made to be accredited by external agencies.

### 8.3.6 Cultural aspects of trust

This category consists of five sub-categories, which are favouritism (Wastah), social context, organisational culture, centralisation and leadership style.

As mentioned earlier, the two universities are located in different cities and therefore within different social contexts. KKU is located in within a society described as tribal, in which social relationships and tribal benefits play a large role in the community. This means that interests of tribal members are more important than organisational interests. Therefore, a member of the tribe will seek to satisfy his or her relatives and tribe by assisting them to meet their requirements and needs. This issue results in what is known as favouritism (Wastah), which means that a staff member at the

university attempts to work for the benefit of other tribe members, even if this is at the expense of the interests of the university. The variation in this phenomenon depends mostly upon the social structure of the population; tribal societies encourage favouritism more than civil societies. The phenomenon creates a negative atmosphere amongst staff members of universities affected by this aspect. Many individuals at a university believe that access to their rights does not depend mainly on their capabilities and potential but, rather, on the number of their relatives and friends who can help them attain their goal.

Therefore, the spread and density of this culture inside universities has an impact on leadership style. In a society where favouritism is widely spread and denser, the leadership assumes a conservative and dominant style in order to maintain and retain financial and administrative powers due to lack of trust of those in lower levels. Alternatively, in societies with less favouritism, there is a more and open participative leadership. Thus, the concept of favouritism has an indirect effect on the centralisation practised in the university.

Many interviewees described how centralisation played a negative role on the organisational culture. Many participants said that centralisation created an atmosphere of dependency upon leadership and, further, that change was always derived from the top. Many interviewees expressed their dissatisfaction with the lack of participation in decision-making and their desire to be involved in the strategic issues of the university. Centralisation also created what some of the participants agreed to described as a lack of confidence in decision-making by some of the deans and heads of department, even if the decision was within their authority. This fear can be attributed to a fear of accountability for their decisions.

## 8.4 Summary

Axial coding, which is the second stage of grounded theory analysis, was discussed in this chapter. During this process, six major categories evolved, each characterising an essential attribute of the emergent theory. The major categories are dense because they include other open code categories and offer a wide vision by allowing assessments across the organisations in which the data was presented. Further, these major categories incorporate with one another easily. This characteristic of theoretical integration of the major categories is further discussed in chapter 9. It recognises a central category among the six main categories and, finally, suggests the ultimate emergent grounded theory.

# CHAPTER 9: SELECTIVE CODING

## 9.1 Introduction

The present chapter discusses the final stage of grounded theory analysis (the selective coding), which integrates the outcomes of the open and axial coding chapters. At this stage, the six main categories are grouped around a single core category (central phenomenon), which represents the main theme of the study (Strauss and Corbin 1998). The result of this chapter is the generation of a substantive grounded theory, which represents a theory derived from the study of a specific empirical context and population that lacked the explanatory power of formal theory (Strauss and Corbin, 1998). Although the substantive theory lacks the broad propositions of a formal equivalent, it can represent specifically the population from which it was built and can be applied back to it (Strauss and Corbin, 1998). A paradigm model was applied in this study as an integrating tool, helping to find the links between categories and hence facilitating their combination around a core category. One main category (legitimacy seeking vs. autonomy seeking) is employed as a core category, which is now labelled as 'conflicting demands of change'. The main categories are joined to the core category and with one other as conditions, actions/interactions and consequences.

## 9.2 The paradigm model

Strauss and Corbin (1998) suggested an integrating device, namely the paradigm model, which assists in the process of weaving the main categories around a single core category and, thereby, building a theory. The paradigm model consists of conditions, actions and interactions, and consequences (Strauss and Corbin, 1998). Strauss and Corbin (1998) described these components as follows:

*"There are conditions, a conceptual way of grouping answers to the questions why, where, how come, and when. These together form the structure, or set of circumstances or situations, in which phenomena are embedded. There are actions/interactions, which are strategic or routine responses made by individuals or groups to issues, problems, happenings, or events that arise under those conditions. Actions/interactions are represented by the questions by whom and how. There are consequences, which are outcomes of actions/interactions. Consequences are represented by questions as to what happens as a result of those actions/interactions or the failure of persons or groups to respond to situations by actions/interactions,*

*which constitutes an important finding in and of itself."* (Strauss and Corbin, 1998, p.128)

They also emphasised that the paradigm model should not be used as a set of directives of conditions and consequences but rather should be employed to enrich the analysis by understanding the circumstances surrounding events (Corbin and Strauss, 2008). They pointed out that:

*"A common mistake among beginning analysts is that they fixate on the specifics of the paradigm rather than thinking about the logic behind its use and what this use of paradigm is designed to do. Being overly concerned about identifying 'conditions' or 'strategies' or 'consequences' in data rigidifies the analytic process."* (Corbin and Strauss, 2008, p.90)

In this study, the paradigm model is influenced by the earlier analysis process rather than by conditions or consequences *per se*, which is evident in the following sections.

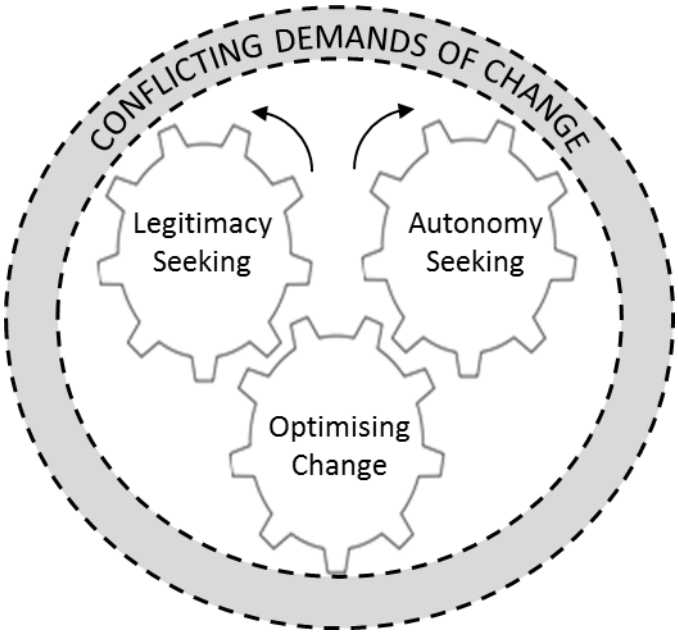
### 9.2.1 The core category

According to Glaser and Strauss (1967), the central phenomenon is represented by the core category, which brings together all the main categories in order to structure the grounded theory. Corbin and Strauss (2008) suggest a list of criteria for choosing the central category.

*"1) It must be abstract; that is, all other major categories can be related to it and placed under it. 2) It must appear frequently in the data. This means that within all, or almost all, cases there are indicators pointing to that concept. 3) It must be logical and consistent with the data. There should be no forcing of data. 4) It should be sufficiently abstract so that it can be used to do research in other substantive areas, leading to the development of a more general theory. 5) It should grow in depth and explanatory power as each of the other categories is related to it through statements of relationship."* (Corbin and Strauss, 2008, p.105)

They also suggest that the core category can develop from other existing categories when there is one that seems to represent the main phenomenon. A researcher may choose a category outside existing categories when there is none that captures the whole story (Corbin and Strauss, 2008).

**Figure 9-1: The core category**




The core category in this study is titled 'conflicting demands of change'; it developed from the existing six main categories. It reflects the universities' attempts to introduce change intended to satisfy the conflicting demands of legitimacy and autonomy. This change is expressed in the attempt of introducing and applying a performance measurement system and, further, is controlled by two major forces: legitimacy seeking and autonomy seeking.

The first force, legitimacy seeking, means the attempts of the university to gain legal acceptance and credibility for its actions from its controlling bodies. This legitimacy is obtained by adhering to the rules and regulations imposed by government (e.g. the Ministry of Higher Education and Ministry of Finance and the Ministry of Civil Service).

The government, through its centralised system, attempts to unify the way it deals with all state-owned organisations, including public universities, through the imposition of uniform laws and standards. Standardisation of government laws and regulations can take different forms in terms of financial, administrative and academic affairs. From the financial perspective, the Ministry of Finance and the General Auditing Bureau are the main controllers of budgeting and auditing issues. They require all universities to follow standard laws and regulations in terms of budget allocation, spending, collection of earnings, transfer of money between items and activities, financial book-keeping and reporting. The Ministry of Higher Education and the Ministry of Civil Service are other examples of central bodies that apply their standard laws and regulations to universities in respect of administrative and academic affairs. All universities attempt to gain legal acceptance and credibility from these ministries on

issues such as employment, admissions and accreditation. The imposition of standard laws and regulations on universities has created an external force that leads universities to perform in order to seek legitimacy and satisfy the demands of their controlling bodies. Universities, in this sense, lose control over a number of change initiatives that can increase the efficiency of their performance.

The second force, autonomy seeking, is reflected by the tendency of a university to be more independent and to determine its own behaviour in order to increase performance efficiency. This force usually comes from within the university itself and is supported by several internal and external factors. Universities attempt to become more independent from government constraints through the introduction and implementation of a number of initiatives that aim to improve performance and increase quality and efficiency. Example of such initiatives include attempts to secure external sources of funding through the provision of paid consultancy and research for companies and government institutions, and searching for investment opportunities. Another example is gaining international accreditation by comparing their performance to international standards through academic accreditation centres. Universities also try to create their own strategic plan, which is separate from that imposed by the government. This autonomy seeking is a varying force, meaning that it differs from university to university and, therefore, its impact on change varies. In other words, the stronger the autonomy seeking, the greater the impact on initiative change.

As discussed above, the strength of the conflict between legitimacy seeking and autonomy seeking varies from one university to another. This difference can be traced to a number of external and internal factors that are discussed in the next section. This conflict between the two forces results in attempts by the universities to balance the demands imposed by government agencies with the demands of autonomy that search for efficient performance. The balance between the two forces can lead to what may be described as ‘optimising change’.

### 9.2.2 Causal conditions

The emergence of the central phenomenon in the study was the result of a number of macro and micro conditions. Macro conditions are those that are broad in scope and have less direct connection to the central phenomenon. Micro conditions are those that could be derived from the macro conditions, are closer to the central phenomenon and may also affect it directly (Strauss and Corbin 1998).

**Macro conditions**

The macro conditions that were identified in the emergence of the central phenomenon are bureaucracy, uncertainty and social context.

Public sector organisations in Saudi Arabia are considered large-scale entities, which manage huge programmes. In order to assist them perform a wide range of activities, bureaucracy plays an important role in formulating and implementing government policy. The Saudi public sector can be divided into three types of organisations: ministries, state-owned enterprises and local government. The administration of the Saudi government is centralised in the capital city of Riyadh.

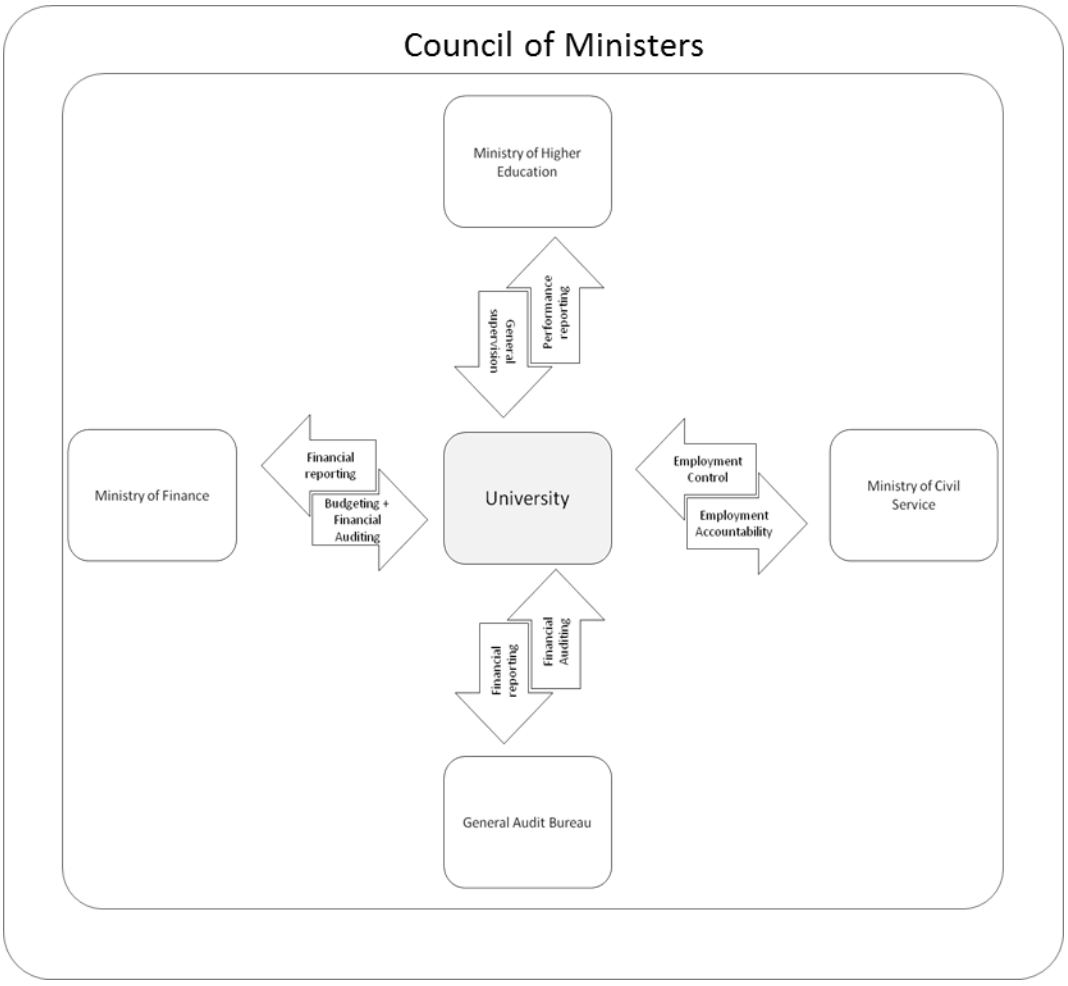
Ministries and state-owned enterprises provide most essential services and products to Saudi society. The ministries form the central part of the government and play a major role in the employment of Saudi citizens. Each ministry is headed by a Minister selected by the King and is supervised by the Council of Ministers, chaired by the King. They are classified into four groups based on their activities: sovereignty or supreme power ministries, production sector ministries, service sector ministries and supporting ministries.

Due to the major development of schemes and programmes in the country, and also in order to improve the effectiveness of Saudi bureaucracy, state-owned enterprises and public agencies were established. They are organised in a similar way to the ministries with some differences in their size and focus. Some of these enterprises are structured differently from others so that they have more flexibility and are released from bureaucratic restrictions. They are supervised by ministries, which sometimes have considerable control over their operations. Although the heads of these enterprises are not members of the Council of Ministers, they report directly to the head of the Council.

The country is divided into provinces or “Emirates”; these transferred the authority that was given to the tribal leaders to the central government to enable the government to deal with the people’s needs as a whole. Each province is divided into cities and villages. Emirates are structured centrally, reporting to the Ministry of the Interior. The governor plays the role of a deputy to the King in his province, taking responsibility for a number of duties such as the security and safety of local people, enforcement of laws, supervision of development projects, following up on the execution of these projects and responding to local people’s needs.

Universities are considered to be state-owned enterprises, which are overseen mainly by the Ministry of Higher Education, which supervises such issues as the assessment and accreditation of academic programmes and institutions. The Minister of Higher Education chairs the boards at all universities, at which the most important decisions for the institutions are taken. Moreover, universities are under the control of other ministries such as the Ministry of Finance, which is responsible for providing universities with budgets and pre-auditing financial transactions. The Ministry of Civil Service also oversees the employment process by imposing standards for the employment of Saudi staff. Other than the ministries of government, the General Auditing Bureau is responsible for post-auditing the financial transactions of the universities (see figure 9-3). This overlap in relations with their regulators has had such a negative impact on the performance of universities that many of strategic decisions cannot be taken without reference to, and the approval of, these parties. Many of the participants said that this dependency on government bodies slows down the process of change within universities.

**Figure 9-2: Relations of universities with other government bodies**



The universities suffer from being in an uncertain environment. This uncertainty was the result of financial and political instability surrounding the university. Universities rely heavily on government funding through the annual budget; this funding is almost entirely reliant on oil revenues. Political instability in the Middle East causes fluctuation in oil prices and this, in turn, can be a cause of instability and uncertainty of government funding. The reaction of the universities to this challenge varies from one institution to another. KKU deals with uncertainty as a threat that is out of their control and can only be overcome by government interference. Many participants from this university stated that uncertainty is the first obstacle to planning. KFUPM, on the other hand, deals with this issue as a challenge, attempting to find solutions to reduce its impact on performance. They consider this in their strategy and then translate it into programmes with measurable objectives. One of the programmes is to secure external non-government funding alongside the government budget.

Another source of uncertainty is the competition for foreign human resources with other local and international universities to attract high quality faculty members. Universities depend heavily on foreign expertise in teaching and research; this makes competition in attracting qualified faculty members a threat to universities. The level of this type of competition is found to be high in both universities. As discussed above, KKU is considered to be a young university, compared with other older institutions such as KFUPM; hence, its need for faculty members is relatively higher. This university deals with competition, as with other sources of uncertainty, as a threat and they blame the government for not providing solutions to this issue. A number of interviewees from this university indicated that standardisation of salaries with other Saudi universities would help to reduce local competition. KFUPM also suffers from this kind of competition but at a lower degree to that of KKU due to the university's age. Competition is dealt with as a challenge and initiative plans are devised to overcome the challenge. Deans are given more authority to negotiate salaries and other incentives with potential faculty members. They also include this challenge in their strategic plan and provide programmes with objectives and measures to overcome it.

The two universities are located within different societies with distinct cultures. KKU is located in a traditional and tribal community, where customs and norms control local society. Blood kinship is an essential part of this culture. This social context has an important impact on the behaviour of individuals within the university. Staff members sometimes misuse power and authority to satisfy the needs of their extended families and other members of their tribe. On the hand, KFUPM is located in a less tribal society. The city in which the university operates is considered to be multicultural, with many international workers from other countries as well as those from other cities in Saudi Arabia. This made local tribalism less influential on society.

These macro conditions resulted in the occurrence of certain micro conditions, which are discussed in the following section.

**Micro conditions**

This section explains the main categories that form the micro conditions. Each category is divided according to its dimensional effects on the central phenomenon. The two micro conditions, namely the passive organisational entity and the active organisational entity, were partly the outcome of the macro conditions. These were vital in shaping the central phenomenon in which these affected, and were affected by, the conflicting demands of change.

Organisational entity in this research means the set of attributes that make the university what it is. Passive organisational entity refers to the set of attributes or factors that discourage focus on quality and efficiency. Active organisational entity, on the other hand, indicates the attributes that promote quality and efficient performance. The components of these entities are discussed below. Both universities under investigation possess the attributes of passive and active organisational entity but the difference lies in the density of one of these entities at the expense of the other. KKU is considered to possess an organisational entity that is more passive, whereas KFUPM can be described as an active entity due to the following attributes.

Firstly, the governance level in KKU is low because the authority for decision-making is very centralised and limited in the top management, whereas deans and heads of departments in KFUPM have more authority. In addition, accountability in KKU is low due to lack of authority and this, in turn, has resulted in the low quality of decisions, whereas accountability in KFUPM is considered to be higher and, hence, there is a higher quality of decision-making.

Secondly, the strategising level in KKU was found to be low in that the university does not possess a strategic plan, whereas KFUPM has created a long-term strategy. The difference in the strategising level between the two universities can be attributed to uncertainty, university condition, university identity and relations with the government. In both universities, uncertainty was found to be high but they differ in the way that this factor is dealt with. KKU considers uncertainty a threat that cannot be overcome without assistance from the government and, hence, they consider uncertainty as a barrier to planning. KFUPM, however, deals with uncertainty as a challenge that can be dealt with. They included uncertainty in their strategy and proposed a number of long-term programmes to overcome this challenge. The university condition is important in

this discussion. KKU is considered as a developing university in terms of basic needs, such as infrastructure and human resources, which makes strategising difficult. Conversely, KFUPM is developed due to its age and small size. Unlike KFUPM, KKU lacks a culture of strategising, which was referred to as university identity. Many interviewees referred to university identity (American vs. non-American) as an important cultural factor in facilitating or hindering the process of strategising. KKU has a national identity, which was described as a culture that does not promote strategic planning, whereas KFUPM has an American identity and so considers strategising as vital in organisational control. These factors combine to make KKU more dependent upon government plans and choose to work with whatever changes the government should impose. However, KFUPM is attempting to liberate itself from government-imposed plans and prefers to create its own.

Thirdly, accounting practices and usage are found in both universities but are not used to control efficiency; rather, they are used to gain legitimacy from controlling government bodies. Financial accounting methods are described as outdated, while budgetary practices are traditional. Cost accounting does not exist in the government accounting system in both universities. However, costs of students and programmes are measured in KFUPM, due to the existence of a developed performance measurement mechanism.

Fourthly, university condition is indicated as a significant factor in organisational control. KKU is a developing university, which lacks experience as well as sufficient infrastructure and human resources, and is large in size. This means that the university is more engaged in securing its basic needs and managing its day-to-day operations. On the other hand, KFUPM is more developed and has already satisfied many of its basic needs; hence, it is more heavily engaged in practices and mechanisms that can assist in organisational control.

Fifthly, the level of trust between the different positions of management is another attribute that forms the organisational entity. KKU has a low level of trust, which was attributed to fear of misuse of authority, whereas KFUPM is perceived to have higher trust between the leadership and the lower levels. The difference in the trust level between the two universities can be related to their respective social contexts, as tribal society can affect the way that people use or misuse authority within the university.

Sixthly, social context can have an impact on the second component of organisational culture - favouritism (Wastah). The tribal and traditional society in which KKU is based can result in high favouritism, in that some staff use their jobs to satisfy the needs of their relatives and families. However, non-tribal societies tend to have the opposite

impact on the use of favouritism. KFUPM is based within a multicultural society, which reduces the impact of tribalism and, consequently, also limits the use of favouritism.

Seventhly, leadership style is another component in the organisational entity. This factor affects and is affected by trust and favouritism. As perceived in KKU, high-level favouritism results in low trust and, accordingly, more autocratic leadership. KFUPM, on the other hand, has a participative leadership due to low instances of favouritism and high levels of trust.

The eighth component of the organisational entity is university identity. As mentioned by all interviewees in KFUPM, the American and western identity of the university has resulted in a culture that encourages quality and efficiency. The participants in KKU, on the other hand, experienced instead what was described as a discouraging culture in the internal atmosphere of the university.

These micro conditions resulted in the occurrence of the central phenomenon, namely the conflicting demands of change. The passive organisational entity tends to make universities more dependent on what government plans and follow their rules in order to legitimise their work. The more active the organisational entity, the greater the tendency of universities to be independent and autonomous.

Legitimacy seeking and autonomy seeking have a contrasting impact on the micro conditions. Universities that are more concerned with legitimising their work tend to have limited strategic plans, greater centralisation and lower trust, which can have a negative impact on efficiency. However, universities that are concerned with being more independent and autonomous tend to create more initiatives in developing practices that promote efficiency and have a higher level of trust.

The interaction between the micro conditions and the central phenomenon had a number of consequences as illustrated in the following section.

### 9.2.3 The consequences

The general consequences of the interaction between the central phenomenon and the macro and micro conditions were the perceptions of PMSs, characteristics of PMSs and usage of PMSs.

Participants in KKU did not show sufficient knowledge about the concept of performance measurement or the performance measures used within the university. No integrated performance measurement system was found in the university.

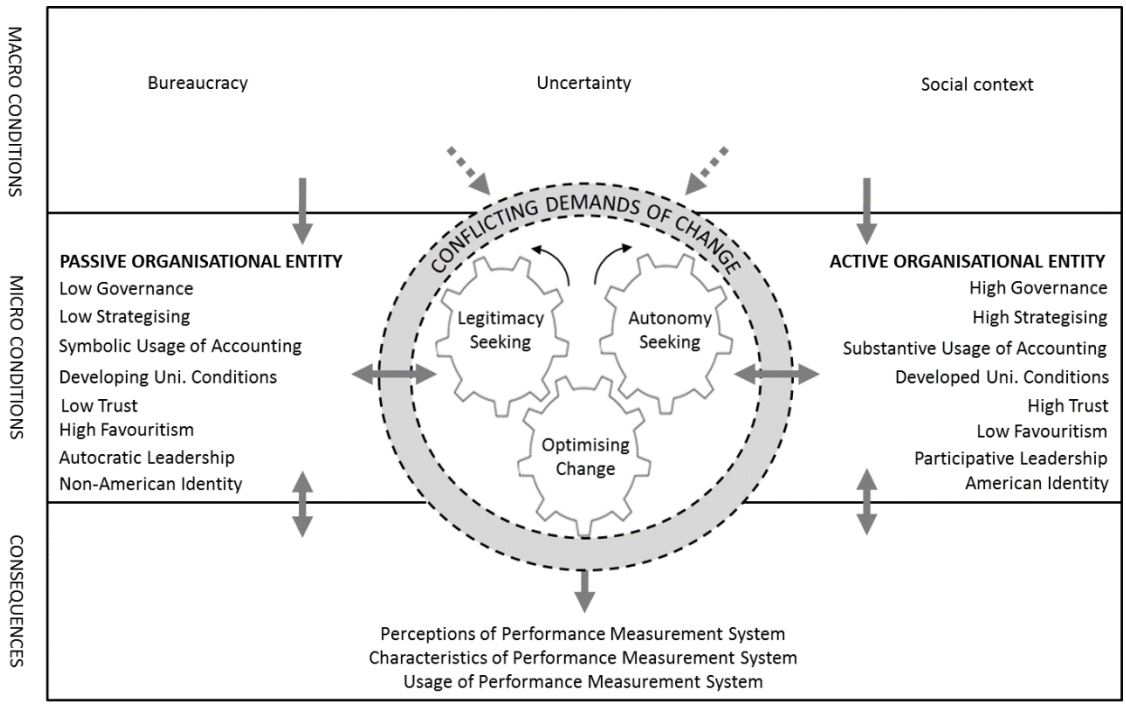
Institutional performance is instead measured by different bodies and in different places. Financial transactions are audited by different groups, such as the Ministry of Finance and the General Auditing Bureau, while academic performance is measured by National Academic Accreditation and Assessment. The government imposes all these mechanisms and the university adheres to them in order to gain legitimacy. Therefore, the usage of these performance measurement mechanisms is symbolic.

On the other hand, participants in KFUPM showed sufficient knowledge about the concept of performance measurement and the performance measures that are used within the university. The university created its own integrated PMS that is linked to its strategic plan. Performance measures include a number of financial and non-financial measures but the non-financial ones are dominant. Financial transactions are audited by the same government bodies as in KKU, while National Academic Accreditation also imposes a performance measurement mechanism for academic performance. Therefore, the university has its own system for measuring performance, which is used to maintain and manage quality and efficiency and, at the same time, uses performance measures imposed by the government in a symbolic way and in order to gain legitimacy.

### 9.2.4 The paradigm model for performance measurement

The paradigm model for performance measurement in Saudi universities is shown in Figure 9-3 below.

**Figure 9-3: Integrative Paradigm**



It summarises the emergent substantive theory of this grounded theory study. The paradigm consists of four components, which are: macro conditions, micro conditions, the central phenomenon and the consequences. Macro and micro conditions resulted in the occurrence of the central phenomenon. To some extent, the micro conditions were created by the macro conditions and, therefore, resulted in the creation of the central phenomenon. The dashed arrows moving from the macro conditions indicate that there is an indirect link between macro conditions and the creation of the central phenomenon. The interaction between these components resulted in the creation of the consequences. The consequences also influence the micro conditions.

## 9.3 Summary

The final phase of grounded theory analysis was discussed in this chapter and the substantive theory accordingly achieved has been explained. As suggested by Strauss and Corbin (1998), the paradigm model was employed in order to integrate the main categories around the central phenomenon (conflicting demands of change) and generate a substantive grounded theory. The next chapter compares the emergent grounded theory with existing literature. This comparison can enrich both the emergent theory and the literature by identifying areas of difference that may uncover interesting insights.

# CHAPTER 10: The emergent theory within extant literature

## 10.1 Introduction

The previous three chapters have discussed the analysis stages and the emergent substantive grounded theory. The substantive theory is discussed in this chapter in relation to the relevant literature. Eisenhardt (1989) pointed out that literature is important for theory building. Strauss and Corbin (1998) also suggested that "Bringing the literature into the writing not only demonstrates scholarliness but also allows for extending, validating, and refining knowledge in the field" (Strauss and Corbin, 1998, p.52). Glaser and Strauss (1967) indicated that the process of comparing the emergent substantive theory with existing theories is appropriate for developing a formal grounded theory. This comparison can be either included in the theory building process or separated into a different chapter (Locke, 2001). In this study, the latter option was chosen in order to let the grounded theory emerge and develop without any influence from existing literature. After that, it is appropriate to consider the relevant literature for comparison.

Different theories have produced different interpretations of performance measurement in accounting studies. Examples of such theories are the stakeholders theory, the agency theory, the contingency theory and the institutional theory (Thompson, 1967; Meyer and Rowan, 1977; McCubbins and Schwartz, 1984; and Preston and Shapienza, 1990). The explanation of this grounded theory study contributes to a certain extent to the field concerned with the new institutional theory of sociology. A short explanation of this institutional theory is provided in this chapter; furthermore, a review of accounting studies is provided to give a brief overview of their assistance to the literature of accounting.

Cultural aspects found in this substantive theory are also discussed in the light of relevant cultural studies, such as Hofstede's cultural dimensions and Hall's cultural dimensions.

## 10.2 Institutional theory

According to Scott (2001), rapid development has occurred in the field of institutional theory in the past few years, mainly in the areas of economics, political science and sociology. Three critical strands of institutional theory have been identified by Scott (2001), which are: institutional theory in economics, institutional theory in political science and institutional theory in sociology. Recently, according to Dillard *et al.* (2004), institutional theory is being used widely in order to obtain a detailed insight into accounting theory at various firms with different social settings. Burns and Scapens (2000) stated that Old Institutional Economics, New Institutional Economics and New Institutional Sociology inform institutional theory for the purposes of accounting research.

As suggested by Hussein and Hoque (2002), the relationship between the structure of a firm, its practices, behaviours and broad social environment is the main concern of New Institutional Sociology. The first proposal of this theory is that various aspects of the formal structure of the firm and its practices are the result of social expectation of the proper practices (Bealing *et al.,* 1996). The second proposition is that firms are encouraged to interact with their environment in a way that satisfies stakeholders for the benefit and sustaining of legitimacy (Dillard *et al.,* 2004). The third proposition is that coercive, mimetic and normative isomorphic processes form the firm's behaviours and practices at micro and macro levels (DiMaggio and Powell, 1983). When changes take place in a firm as a result of formal and informal pressures imposed by other bodies (e.g. government) on which the firm is dependent, the coercive process occurs. The mimetic isomorphic processes are present in circumstances where a firm is faced with a high degree of uncertainty and therefore seeks to copy other successful organisations in dealing with such a situation. When change happens in response to the pressures applied by professional bodies (e.g. accreditation bodies), the normative isomorphic process occurs.

Institutional theory has been adopted in accounting studies, which investigate why and how accounting becomes what it is or is not (Moll *et al.,* 2006). The theory suggests that the economic, political, regulatory and social environments pressurise and are, in turn, pressurised by accounting practices (Moll *et al.,* 2006).

Performance measurement in both private and public sector organisations is a key topic that has been explained by institutional theory in accounting studies (Johnsen, 1999; Brignall and Modell, 2000; Lawton *et al.,* 2000; Modell, 2001, 2003, 2005; Hussain and Hoque, 2002; Chang, 2006). Other topics include management

accounting change (Burns and Scapens, 2000; Bums, 2000; Granlund, 2001; Soin *et al.,* 2002; Siti-Nabiha and Scapens, 2005), cost accounting (Carmona and Macias, 2001; Modell, 2002; Ahmed and Scapens, 2003; Carmona and Danoso, 2004; Modell, 2006), accounting role and regulations (Bealing *et al.,* 1996; Forgarty, 1996; Forgarty *et al.,* 1997; Seal, 1999; Lapsley and Pallot, 2000; Carpenter and Feroz, 2001; Hines *et al.,* 2001; Eden *et al.,* 2001; Broadbent *et al.,* 2001; Kurunmaki *et al.,* 2003; Forgarty and Rogers, 2005). Government organisations and school budgeting are other areas that have been explored (Edwards *et al.,* 2000; Collier, 2001; Seal, 2003), along with institutionalisation processes (Bums and Scapens, 2000; Dillard *et al.,* 2004; Bums and Baldvinsdottir, 2005), and external and internal auditing (Basu *et al.,* 1999; Al-Twaijry and Brierley, 2003).

In some cases, accounting is adopted as a legitimating device rather than for facilitation for operations, as argued by some researchers (Bealing *et al.,* 1996; Forgarty, 1996; Forgarty *et al.,* 1997; Lapsley and Pallot, 2000; Modell, 2001; Hines *et al.,* 2001; Ahmed and Scapens, 2003; Kurunmaki *et al.,* 2003; Carmona and Danoso, 2004). Other research studies have highlighted the fact that certain institutions pressurise the introduction of new accounting systems and the use of accounting information in their organisations (Bums, 2000; Granlund, 2001; Soin *et al.,* 2002; Forgarty and Rogers, 2005). It has also been indicated that accounting practice is sometimes decoupled from the main operations (Basu *et al.,* 1999; Johnsen, 1999; Edwards *et al.,* 2000; Collier, 2001; Modell, 2003; Siti-Nabiha and Scapens, 2005). Institutional pressures -such as coerciveness, mimetic and normative - are causes of the progress and implementation of new accounting practice in firms as identified by many studies (Seal, 1999; Lawton *et al.,* 2000; Carpenter and Feroz, 2001; Eden *et al.,* 2001; Carmona and Macias, 2001; Hussain and Hoque, 2002).

In general, institutional theory suggests that accounting affects, and is affected by, the social, political, economic and regulatory environment within which organisations operate.

In this study, it was found that accounting practices are divided into financial accounting, budgeting, cost accounting and performance measurement. With regard to financial accounting and budgetary practices, it was discovered that both universities implement cash-based accounting and line-item budgets in response to the government's requirements (i.e. isomorphic coercive process). Most interviewees were not satisfied with these practices, describing them as out-dated and insufficient in providing information for the decision-making process. Therefore, their use of financial and budgetary practices was believed to be symbolic and a means of gaining legitimacy from the government rather than for facilitation of operations. This is

consistent with findings in many accounting studies informed by institutional theory (Bealing *et al.,* 1996; Forgarty, 1996; Forgarty *et al.,* 1997; Lapsley and Pallot, 2000; Modell, 2001; Hines *et al.,* 2001; Ahmed and Scapens, 2003; Kurunmaki *et al.,* 2003; Carmona and Danoso, 2004; Goddard and Assad, 2006).

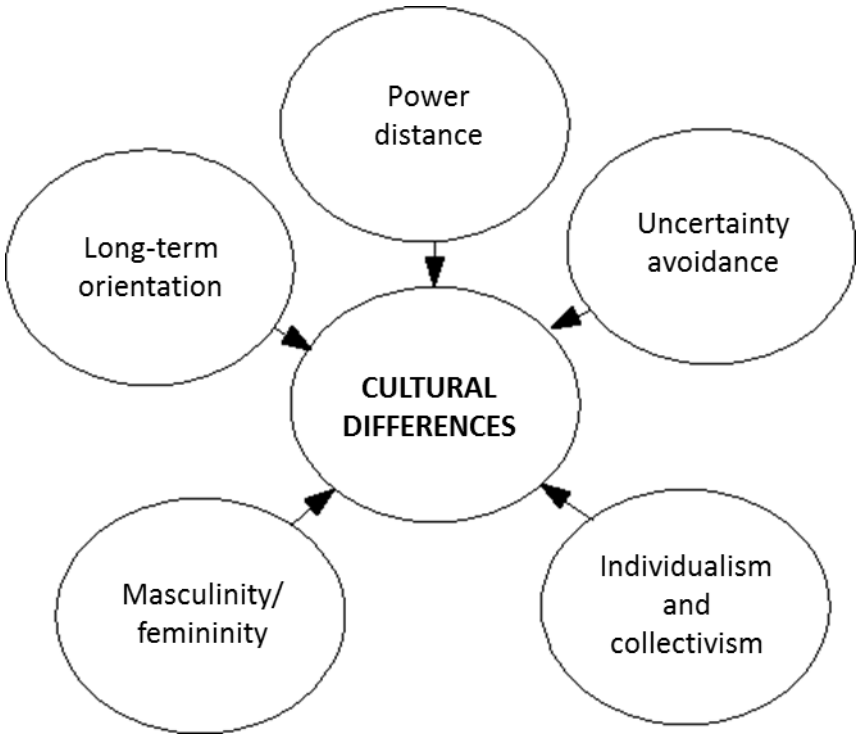
The reporting of cost information was not required by the government at either university; hence, it is not practiced at KKU. However, in KFUPM, the internal performance measurement system requires the provision of certain financial information, such as cost of the student and the programme and, therefore, these measures were calculated by the quality office, separate from the general accounting system in the university.

The usage of performance measurement differs between the two universities under investigation. KKU attempts to adopt the performance measures suggested by the government (i.e. isomorphic coercive process), which fits the overall government strategic plan, without trying to modify the measures to fit their internal requirements. On the other hand, it was found that KFUPM attempts to play on two axes: seeking to satisfy the requirements of the government by applying its imposed measures while, at the same time, building their own measures to satisfy their own internal requirements and strategic plan.

## 10.3 Hofstede's cultural dimensions

Hofstede undertook a critical analysis to determine how culture can influence an international business and the decisions pertaining to it. He indicated that an outsider cannot implement his own cultural decisions in a local environment with success. This would certainly lead to impractical and ineffective decisions. This difference in culture may also affect management accounting and on a global scale. Hofstede selected IBM, a company operating in over 50 countries, and studied multiple samples of employees. He was able to identify five important dimensions that have an impact on culture and its constituency (Hofstede, 2001). These dimensions were found to be occurring continuously in a review of cross-national studies of management control systems (Bhimani, 1999). Bhiman claims that Hofstede's findings and study designs can serve as a cornerstone for further similar researches, analysis and management practices.

**Figure 10-1: Hofstede's Cultural Dimensions**




As shown in figure 10-1, Hofstede claims that there are five dimensions of culture. These include power distance, uncertainty avoidance, individualism and collectivism, masculinity and femininity, and long-term orientation.

Hofstede provides the following definition of power distance. He states that "*the power distance between a boss B and a subordinate S in a hierarchy is the difference between the extent to which B can determine the behaviour of S and the extent to which S can determine the behaviour of B*" (Hofstede, 2001, p.83). It is a measure of the interpersonal power and influence between the manager and the employee as perceived by the less powerful of the two, the employee. Being a manager in a high power distance culture means exercising power and maintaining a gap between superior and subordinates. Inequality is more accepted in this culture and employees are usually unwilling to disagree with their managers. People in this culture like to work for bosses who take the responsibility and tell them what to do. Managers in a low power distance culture are less powerful and they consider other employees to be colleagues. In this culture, people believe that inequalities should be reduced and they are not usually afraid of disagreement with bosses. They also expect to be consulted before decisions are made.

The second dimension, uncertainty avoidance, indicates how easily the culture can cope with future uncertainty through the domains of rules and laws. People in a strong

uncertainty avoidance culture do not like uncertainty and feel threatened by it; they need clarity and order. They fight against uncertainty through the introduction of more laws and regulations. Conversely, people in a weak uncertainty avoidance culture accept uncertainty more readily. They take a pragmatic view about keeping or changing rules and regulations.

Individualism and collectivism focuses on the degree to which individuals are integrated into groups or on the relationship between an individual and the collectivity that prevails in a certain society (Hofstede, 2001). It indicates the way people live together in groups, such as families or tribes, which has many implications for behaviour and values. In an individualist culture, collective and social relationships are loose and people focus on personal success rather than the achievement of the group. The right to a private life and opinion is more secure in this culture. On the other hand, social relationships in a collectivist culture are considered to be tighter; people are members of extended families or tribes, which can have an impact on an individual's privacy.

The dimension of masculinity/femininity concerns the degree to which gender roles are different from one culture to another; the relationship between men and women varies along the dimension. Gender roles are differentiated in masculine cultures where men dominate, while women take supporting and caring roles. The gender roles are more flexible in feminine cultures; hence, inequality between the genders is minimised.

Hofstede introduced long-term orientation as a new dimension in response to a Chinese value survey, which criticised Hofstede's previous work as inadequate in reflecting Asian perspectives on culture. Hofstede states that "Long Term Orientation stands for the fostering of virtues oriented towards future rewards, in particular perseverance and thrift. It's opposite pole, Short Term Orientation, stands for the fostering of virtues related to the past and present, in particular, respect for tradition, preservation of 'face' and fulfilling social obligations" (Hofstede, 2001, p 359). A country with a high long-term orientation means that it supports the values of long-term commitments; consequently, people expect long-term rewards in return for hard work. On the other hand, a country with a low long-term orientation ranking does not prescribe the value of long-term orientation and, therefore, short-term rewards are expected.

These five cultural dimensions were investigated in seven Arab countries: Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia and the United Arab Emirates. The following findings were made in this analysis. The primary discovery of Hofstede's analysis was

the large power distance in these countries, meaning that fundamental decision-making power lies with the higher echelons of authority. This leads to a high inequality in power as well as a lack of competent authorities within the organisation. Uncertainty avoidance among these countries was also found to be very high. This translates into decision-making powers, rule making and control maintenance being restricted to the higher authorities, with the lower staff primarily expected to follow these orders. The third significant finding was a low presence of female workers and employees within the company, most probably due to local cultural factors requiring that women should be restrained to family and society-based roles, rather than becoming employees of large business enterprises. Therefore, the Hofstede analysis found a very high masculinity rating within this region.

The significance of these findings can only be understood when comparisons are drawn with an enterprise showing the opposite features in the Hofstede index. Anglo-American countries, for example, demonstrate a low power distance and a high individualism culture and therefore form a direct contrast with Arab culture. Individualism is a strong feature of the western culture and this shows itself in business management as well (Tayeb, 1993). The most important differences between Arab and western culture lie in power distance, individualism vs. collectivism and uncertainty avoidance.

It was found in the present research study that university identity and roots (i.e. American vs. national) have a considerable impact on organisational culture in the two universities. KFUPM was established by American expertise and hence American culture and management style have had an impact on the way in which daily issues are managed inside the university. KKU, on the other hand, was established by the merger of two branches of former national universities and, hence, it is mainly influenced by national culture. These cultural differences are consistent with Hofstede's findings regarding power distance, uncertainty avoidance and individualism/collectivism.

KKU is considered to have a high power distance culture, in which the president exercises a high level of authority and power and maintains a gap between himself and other staff. In KFUPM, however, there is a low power distance culture in that the president delegates a considerable amount of power to his vices and deans. Unlike the leadership in KKU, the president in KFUPM is participative and considers staff and faculty members to be colleagues.

Regarding the second dimension, uncertainty avoidance, the findings indicate that KKU has a strong uncertainty avoidance culture. The university's management feels threatened by uncertainty and believes it is a serious obstacle to planning; however, it

considers that abiding by government laws and regulations will insure clarity. On the other hand, KFUPM has a weak uncertainty avoidance, in which uncertainty is perceived as a challenge, rather than a threat. It is believed that uncertainty can be managed when included in strategic plans and provided with long-term solutions.

In terms of individualism vs. collectivism, the following finding was made. KKU is considered to have a collectivist culture, in which tribalism plays a large role in its society. Social relationships in this culture are tight-knit and the commitment of university staff to their extended families and tribes is considered to be high. Conversely, KFUPM enjoys an individualist culture, where social relationships are considered loose and people focus more on their jobs and organisational commitment.

The other two cultural dimensions - masculinity/ femininity and long-term orientation - are not supported in this study. This is because genders are completely separated in Saudi universities and females were not included in this study due to lack of access. The dimension of long-term orientation was not measured in Arab countries in Hofstede's study. Therefore, the comparison between an American-driven culture and a national Arab culture is not possible in this dimension.

## 10.4 Summary

This chapter provides insights from comparison of the substantive grounded theory with the institutional theory and other cultural theories. This comparison suggests that an isomorphic coercive process was the cause for implementing financial accounting and budgeting practices in both universities and also the application of a performance measurement system in KKU. The execution of the performance measurement system in KFUPM was partly informed by the isomorphic coercive process. The discussion of Hofstede's cultural dimensions has also provided valuable findings. Unlike KKU, KFUPM is considered to have a low power distance, low uncertainty avoidance and an individualist culture. The concluding remarks relating to this research study are provided in the following chapter.

# CHAPTER 11: CONCLUSIONS

## 11.1 Introduction

The objective of this chapter is to summarise the main ideas drawn from this study and their contributions to empirical, theoretical, methodological and practical knowledge. It also aims to provide further suggestions for future research. Section 11.2 provides a summary of the research. The contributions made by the research are discussed in section 11.3. The final section outlines directions for future research.

## 11.2 Summary of the research

This research explored the role and usage of performance measurement systems in Saudi universities. It aimed to generate a theory derived from data related to the phenomenon under investigation. Interpretive philosophy was believed to be the most suitable foundation due to the research objectives and the nature of the data. Strauss and Corbin's (1990, 1998) grounded theory procedures were deemed appropriate as the research methodology.

The research proposes a substantive grounded theory that suggests that use of performance measurement systems is affected by the conflicting demands of change, meaning that they are intended to satisfy the conflicting demands of legitimacy and autonomy seeking. In turn, these conflicting demands affect and are affected by a number of micro conditions, passive organisational entity and active organisational entity, which are the result of various macro conditions. Macro conditions also have indirect links to the occurrence of the central phenomenon.

This substantive grounded theory was compared to existing literature in chapter 10. The comparison suggests that elements of the new institutional theory of sociology (i.e. isomorphic coercive process) were found to enrich the substantive theory. Isomorphic coercive process was discovered to be the cause of implementing financial accounting and budgeting practices in both universities studied and also the application of a performance measurement system in KKU. The application of the performance measurement system in KFUPM was partly informed by the isomorphic coercive process. Hofstede's cultural dimensions were also important in this comparison. Cultural dimensions, such as power distance, uncertainty avoidance and individualism/collectivism, were useful in interpreting elements of organisational culture in the two universities.

## 11.3 Contributions of the research

This thesis makes several theoretical, methodological and practical contributions as follows.

### 11.3.1 Theoretical contributions

Theoretical contributions of the present research can be highlighted in relation to the accounting research undertaken generally and into performance measurement systems in particular. It also contributions to knowledge of the public sector, and more specifically Higher Education. As mentioned in chapter 1, this research is justified by the apparent need for studying accounting in its organisational setting (Chua, 2006). Therefore, this study contributes to the accounting literature by offering a deep understanding of accounting in an organisational context. Accounting research has been criticised for failing to provide rich understandings and, hence, this thesis contributes by filling this gap of knowledge to some extent. In addition to providing an interpretive insight into accounting, the study offers specific knowledge of performance measurement systems in two public universities in Saudi Arabia.

The literature review chapter addressed the broad context of the public sector and went on to focus on the narrow context of higher education. The chapter addressed the point that NPM practises in the public sector (Hood, 1995) has introduced a business-like nature and strategies, such as efficiency, competition and awareness of bottom-line considerations. This also includes the introduction of market-based accounting practices such as performance measurement and management. In line with the timeliness of the current study regarding performance measurement systems, this research is also most relevant for the public sector and higher education in particular. This study presents an insight into how two public universities in Saudi Arabia perceive, use and deal with performance measurement systems. Perception and usage of performance measurement systems in the cases were determined by the conflicting demand of change, which means the conflict between the university's tendency to seek legitimacy or seek autonomy. This core concept of the study was determined based on underlying organisational characteristics of the university, either passive organisational entity or active organisational entity. These micro level conditions tend to be influenced by macro conditions like bureaucracy, uncertainty and social contexts. This study supports the findings that of isomorphic processes in the new institutional theory of sociology. In particular, it has provided this specific area of literature with empirical evidence as to how the bureaucratic power of the government can create coercive pressure on the application of certain accounting practices. The study also

supports the knowledge area of Hofstede's cultural dimensions by providing insights into the links between power distance, uncertainty avoidance and individualism/collectivism; further, it illuminates the application of accounting practices in general and performance measurement systems in particular. Cultural obstacles, such as tribalism and favouritism has emerged as powerful determinants of the application of performance measurement systems. This area of research is believed to be new and has not been discussed in the literature of performance management.

### 11.3.2 Methodological contributions

Grounded theory has been adopted in this study, answering demands for its use in accounting and management research (Parker and Roffey, 1997; Locke, 2001 and Llewellyn, 2003). This study also responds to calls for more interpretive studies (Ahrens and Chapman, 2006 and Chua, 2006). Therefore, the execution of this grounded theory contributes to the development of the methodology itself as well as contributing to the accounting literature informed by the methodology. These contributions are set out below.

First, this research provides a detailed account of how grounded theory is used in management accounting research. This is, therefore, a contribution to grounded theory empirical literature, in which details of the different stages and procedures of the analysis are provided. This is considered important to assist the reader in following the different stages of building the theory and also to offer explanations for new grounded theory analysts.

Secondly, the study has contributed empirically to interpretive and grounded theory studies on the phenomenon of performance measurement systems in a social and cultural setting where research is lacking (Broadbent, 1999).

Finally, a reflection on the practical issues that arose during the research process can also contribute to the practical understanding of this methodology. This research has produced a substantive grounded theory of performance measurement systems in two Saudi public universities. This indicates that it is a theory based on particular research settings possessing a certain level of generality. In order to develop a formal theory with high level of generalisability, further investigations are needed. These investigations can be conducted by testing the substantive theory in various groups and situations, thereby interactively expanding the substantive grounded theory. A formal theory can also be generated through direct comparisons of data from other substantive areas in the literature or in the experience of the researcher (Glaser, 2007).

This research adopted Strauss and Corbin's (1998) approach, which has been criticised for being prescriptive and, hence, forcing the theory to emerge (Charmaz, 2000; Glaser, 2002). In this study, the approach was adopted in a flexible way, which, it was found, resulted in a well-grounded theory. Although the principle features of this approach were followed to ensure that a theory emerged from the data, the suggested analytical procedures were employed in a way that fitted the objectives of the research and the nature of data. For example, Strauss and Corbin (1998) suggested using the paradigm model, which can help in combining the main categories around the central phenomenon. They pointed out that the paradigm model should consist of causal, intervening and contextual conditions, the core phenomenon, actions/interactions and consequences. The paradigm model in the present research, however, was presented slightly differently. It included the core phenomenon, macro and micro causal conditions and the consequences resulted from the interaction between the micro conditions and the core phenomenon. Too much adherence to the suggested procedures might reduce the researcher's creativity and, consequently, might result in a failure to discover important features within the data. Strauss and Corbin (1998) advise researchers to deal with these procedures as rules of thumb, rather than as commandments.

### 11.3.3 Practical contributions and suggestions

This section highlights practical contributions and suggests improvements for decision makers to consider. The findings of this study have a number of practical implications for performance measurement in the context of Saudi universities.

This study contributes to practical knowledge by providing insights into the perceived factors that can affect the design and usage of performance measurement system. These factors include uncertainty, social context, bureaucracy, governance level, strategising level, other accounting practices, university condition, trust, favouritism, leadership style and university identity. The first three factors are macro conditions that have a direct impact on the micro factors. The study also has a number of suggestions for improvements as follows.

Firstly, reform programmes in Saudi universities, aimed at improving academic performance efficiency, should address the following. Financial reform is a fundamental driving force for comprehensive administrative reform. As in all public sector organisations in Saudi Arabia, the financial management system in universities depends on the traditional line-item budgeting system based on cash accounting, which focuses only on cash inputs, rather than on outputs and outcomes. This method was described by several interviewees as outdated and irrelevant to the requirements

of the performance measurement system. It also lacks the necessary information required by decision-makers to enable them to determine spending priorities and therefore to make optimal use of public funds. Decision makers should consider whether to change to a programme budgeting system based on accrual accounting. This would shift the emphasis away from cash inputs and instead towards outputs and outcomes. This would hopefully result in greater efficiency and better performance.

Secondly, according to many participants, the imposition of standard government laws and regulations on all universities has had a considerable impact on their financial and administrative autonomy. This lack of autonomy means that contextual differences between the universities are not taken into consideration but, rather, results in them being treated as identical institutions. There are, however, Saudi universities that are well developed and therefore possess the potential and desire to run their operations without the government interference. Therefore, it is advised that the government should grant more flexibility and autonomy to such universities in order that they can manage their programmes and projects in the light of measurable strategic objectives.

Thirdly, a number of cultural obstacles to change are highlighted within this study. Cultural issues, such as tribalism and favouritism, are believed to have a considerable impact on trust and performance. Therefore, it is advised that these issues should be given more attention when introducing change into universities.

## 11.4 Evaluation of research objectives

The first research objective was to acquire empirical knowledge of performance measurement systems in the studied Saudi universities and develop a theoretical understanding of the phenomena under investigation. This research is an empirical investigation exploring the role and usage of performance measurement systems in two Saudi universities. The researcher spent five months in the two cases interviewing participants and collecting relevant documents. With the help of Strauss and Corbin's (1990, 1998) methodology, the researcher ended up with a grounded theory that emerged from data related to the phenomenon under investigation. The emergent grounded theory suggests that perceptions, characteristics and usage of performance measurement systems in the two universities is different due to the influence of conflicting demands of change, meaning that they are intended to satisfy the conflicting demands of legitimacy and autonomy seeking. These conflicting demands take place as a result of the occurrence of a number of organisational characteristics

that determine whether the university has passive or active organisational entity[10]. The theory also suggests that there are three macro conditions, bureaucracy, uncertainty and social context, which have an influential power on the occurrence of micro conditions and indirect links to the occurrence of the central phenomenon.

The second research objective was to understand the relationship between performance measurement systems and contextual factors. As mentioned in the previous paragraph, the emergent grounded theory suggests a number organisational characteristics that determine whether the university has passive or active organisational entity. Contextual factors that feature passive organisational entity are: low governance, low strategising, symbolic usage of accounting, developing university conditions, low trust, high favouritism, autocratic leadership and non-American identity. Other contextual factors that feature active organisational entity are: high governance, high strategising, substantive usage of accounting, developed university conditions, high trust, low favouritism, particpative leadership and American identity.

The final research objective was to suggest practical improvements to performance measurement systems in the two Saudi universities. The researcher suggested several practical areas to be taken into account for performance measurement developers in the two universities. The study identified a number of macro and micro factors that need consideration when designing a performance measurement system. The identification of such factors would help developers of performance measurement systems to spot areas that could have positive or negative effects on the measurement system. Other practical areas like reform of the financial management system, the need for more financial and administrative autonomy and the consideration of cultural obstacles have been found by the participants to be fundamentally significant for any attempts of improvement in the performance measurement system. More details of practical suggestions are found in section 11.3.3.

## 11.5 Evaluation of the research strengths and limitations

This research concluded its findings with an emergent grounded theory, for which its strengths and limitations are discussed below.

[10] Passive organisational entity refers to the set of attributes or factors that discourage the university from focusing on quality and efficiency. On the other hand, active organisational entity indicates the attributes that promote quality and efficient university performance.

The grounded theory methodology itself ascertains the trustworthiness of this research theory. The researcher ensured that practices that could strengthen and verify the findings are applied in this study. Such methodological practices include constant comparison, theoretical sampling and conceptualisation. The application of these practices assisted the researcher to ensure that the theory is continuously validated through constant comparison and the research outcomes are grounded in the data, which were gathered in the guidance of theoretical sampling. More details about these practices are found in chapter 5.

On the other hand, as in any study, this research was subject to certain limitations. Nevertheless, the researcher was very careful in structuring this research so that such limitations would not significantly affect the findings.

As discussed earlier, performance management in the public sector, more particularly in higher education, is a research area where theory is still emerging. This determined the need to follow the interpretive approach and grounded theory methodology in this study. Therefore, this has put a significant need for the researcher to focus his research on two cases and collect a huge amount of data in order to obtain a deep understanding of the phenomena. The researcher had to manage all data manually because they were collected in Arabic and there was no language support for all the software-aided methods existed on the time of data analysis. Therefore, data analysis was a very time consuming stage.

As performance measurement systems aim to disclose information of strengths and weaknesses of organisational performance, revealing this kind of information might lead to disclosure of some confidential data. Consequently, this topic was occasionally dealt with in the studied cases as a sensitive issue. As a result, some interviewees did not agree to talk about the specific issues related to real results of the performance measures. Another source of hesitation was found when talking about the influence of political power and its implications on the university performance. Some people who accepted to participate hesitate to reveal some types of information of political nature. If not dealt with correctly, this limitation should have had a negative effect on the richness of the data and would leave some issues not completely addressed. The researcher, however, spent sufficient time in the two cases and that helped to break some of the above-mentioned barriers and started to build a good and an informal relationship with the participants. In addition, the information obtained from other interviews as well as the triangulation of the data collection methods helped to deal with undisclosed information.

## 11.6 Considerations of generalisability

The present study examined the phenomenon of performance measurement systems in two Saudi public universities, which makes it is difficult to generalise the findings to other contexts. For example, cultural differences that might occur in other Saudi universities (e.g. Islamic universities) could have an effect on the interaction between the core phenomenon and the conditions. However, the emergent grounded theory of the present study has identified a set of micro and macro conditions under which theoretical understandings about the phenomenon are applicable. Therefore, it is possible that the findings of this research are generalisable when the same conditions apply in other contexts (Strauss and Corbin, 1998).

## 11.7 Suggestions for further research

The researcher hopes that this thesis becomes a point of departure for further research in accounting studies. The following are some suggestions.

Firstly, the findings of emergent grounded theory explain the phenomenon of performance measurement systems in two Saudi public universities. Therefore, the generalisability of the findings to all Saudi public universities is limited. However, the emergent grounded theory has identified a number of micro and macro conditions under which theoretical explanations about the phenomenon are relevant. These conditions might occur in other Saudi institutions, hence the generalisability of the research findings can apply to other Saudi universities (Strauss and Corbin, 1998). The hypothesised relationships between the core phenomenon and the conditions can be further examined in similar Saudi universities. This could yield a refined and a more developed grounded theory on the phenomenon of performance measurement in Saudi universities (Strauss and Corbin, 1998).

Secondly, the findings of this study may provide theoretical understandings for the study of performance measurement systems in the Saudi university sector in general. However, the cultural differences that might occur in other universities (e.g. Islamic universities) could influence the interaction between the core phenomenon and the conditions in other universities. Therefore, more comparative contextual researches incorporating different universities with different organisational cultures are essential.

Thirdly, the accounting system in Saudi universities is a small part of the Saudi bureaucratic system. Further research is required to examine the influence of environmental, political and social pressures on accounting in other public sector

organisations in the country. A similar research could be useful in a private sector university, where profit seeking might be expected to have a favourable impact on the application of a performance measurement system.

Finally, the findings emphasised that leadership plays an essential role in determining the use of performance measurement systems in the investigated cases. Therefore, additional research is required to focus on the relationships between performance measurement systems and leadership styles and attitudes in Saudi universities.

# Appendices

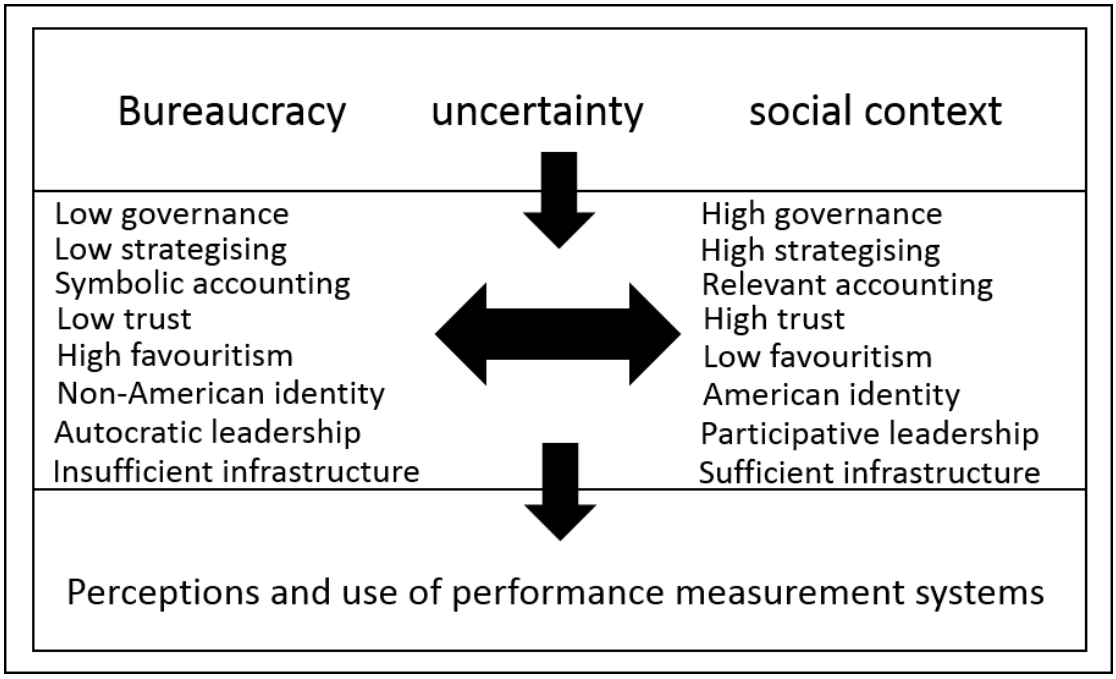
## Appendix 1: Examples of interview questions

| Examples of initial interview questions |
|---|
| Could you describe your role and responsibilities in the university? |
| Could you illustrate your organisational objectives? |
| Are these objectives related to the general strategy of the university? How? |
| How are these objectives measured and by whom? |
| How did you create these objectives and measures? |
| Who are the stakeholders of your performance measurement report? |
| What do you think of these performance measures? |
| What are the factors that limit your performance measurement process? |
| What are the factors that facilitate your performance measurement process? |
| How can you overcome the limiting factors and improve facilitating factors? |

| Examples of additional questions for theoretical saturation |
|---|
| How do you describe the social context in which the university operates? |
| How does this social context influence the performance of the university and its members? |
| How do you describe the relationship between your university and other central ministries? |
| To what extent is your university autonomous in decision making? |
| How do you describe the organisational culture of your university? |
| How do your describe the style of leadership performed in your university? |
| How is strategic decisions made in your university? |
| To what extent does the university leadership have an influence on strategic decisions? |
| How do you describe the accounting system used in the university? |
| Does accounting help in the formulation of performance measures? If yes, how? If no, why not? |
| How do you describe the university's strategy and what influence does it have in your daily life in your office? |
| How do you describe trust between management levels and how does this affect your daily performance? |
| How do you describe the infrastructure that the university has? To what extent does infrastructure affect your performance? |

| Examples of questions asked to related agencies |
| --- |
| Could you describe your role and responsibilities in the agency? |
| What role does your agency play in universities? |
| Do you require any type of performance reports from the university? If so, what are the details the university should include in the report? |
| How do you describe the role that your agency play in the creation of performance objectives and measures of the universities? |

## Appendix 2: Provisional diagram of the findings



# Appendix 3: Example of open coding process

Interview 1/3: Dean

| No. | Interview note | Open Code |
|---|---|---|
| 1/3/1 | مسئولية عميد الكلية تنقسم إلى شقين، الشق الأول الأكاديمي وهو الإشراف على سير العملية التعليمية في الكلية بجميع أقسامها وبالنسبة لكليتنا فانه لا يوجد إلا قسم واحد ومركز.<br>**Dean's responsibility is divided into two parts; the first part is supervising the academic and educational process in the college in all its divisions. In our college there's only one department and one centre.** | Academic supervision role of dean |
| 1/3/2 | بالنسبة للشق الثاني وهو الإداري وهو ما يتعلق بتنفيذ الأنظمة واللوائح والتعليمات التي تأتي من الإدارة العليا للجامعة سواء من مدير الجامعة نفسه او من احد وكلائه.<br>**The second part is the administrative one, which is implementing the rules and regulations that come from the senior management of the University, either form the University president or one of his vices.** | The administrative role of dean |
| 1/3/3 | بالنسبة للمدة التي قضيتها كعميد هي خمس سنوات ولم أتقلد أي منصب إداري قبل ذلك<br>**I've been as a dean for five years and I didn't have any managerial positions before this.** | Lack of managerial experience |
| 1/3/4 | نعم لدينا وكما تعلم نحن كلية اللغات والترجمة وفي الوقت الحاضر نحن لا ندرس إلا اللغة الانجليزية وليس لدينا أقسام أخرى للغات الأجنبية الأخرى. كذلك نحن نهدف إلى تنفيذ السياسة التعليمية العليا نظراً لوجود أقسام موجودة في جامعات المملكة الأخرى تدرس اللغات المختلفة غير الانجليزية والتي كان الإقبال عليها محدود وبالتالي نحن تريثنا قليلاً في فتح أقسام تدرس اللغات الأجنبية الأخرى. وبالتالي فان الهدف الرئيس في عملياتنا هو إعداد مواطن مؤهل للتواصل باللغة الانجليزية ولشغر وظائف في السوق السعودية تحتاج الى اللغة الانجليزية سواءً في مجال التدريس أو الترجمة أو أي | Dependence on government plans |

# Appendix 4: Example of open categorising process

Open categories of interview 1/3

| Open code | Open category |
|---|---|
| Academic supervision role of dean | Individual responsibilities |
| Administrative role of dean | |
| Lack of managerial experience | |
| Dependence on government plans | Dependency on government initiatives |
| General objectives of college | Lack of measurable institutional objectives |
| Lack of measurable objectives | |
| Curricular objectives rather than institutional ones | |
| Curricular measures rather than institutional ones | Lack of institutional PMS |
| Lack of discussion of strategic issues in college board | Low involvement in strategic issues |
| Limited ability of decision making in college board | Lack of authority delegation |
| Lack of decision making power of deans | |
| Lack of practical authority delegation | |
| Limited resistance in the university board | Internal centralisation |
| Inflexibility in changing authority | |
| Centralised admissions | |
| Lack of process documentation | Lack of documentation |
| Individual performance evaluation | Subjective Individual performance evaluation |
| Presence of authority definitions | Internal centralisation |
| Flexibility of staff job responsibilities | Performance flexibility |
| Lack of good qualified FMs | Shortage of qualified manpower |
| Limited number of staff and FMs cause inability in performing basic tasks | |
| Standardisation of rules and regulations | Sector-related centralisation |
| Centralisation is a character of Saudi universities | |
| Inflexible and out of date salary scale | Sector-related out of date regulations |

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